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Women's health & fitness

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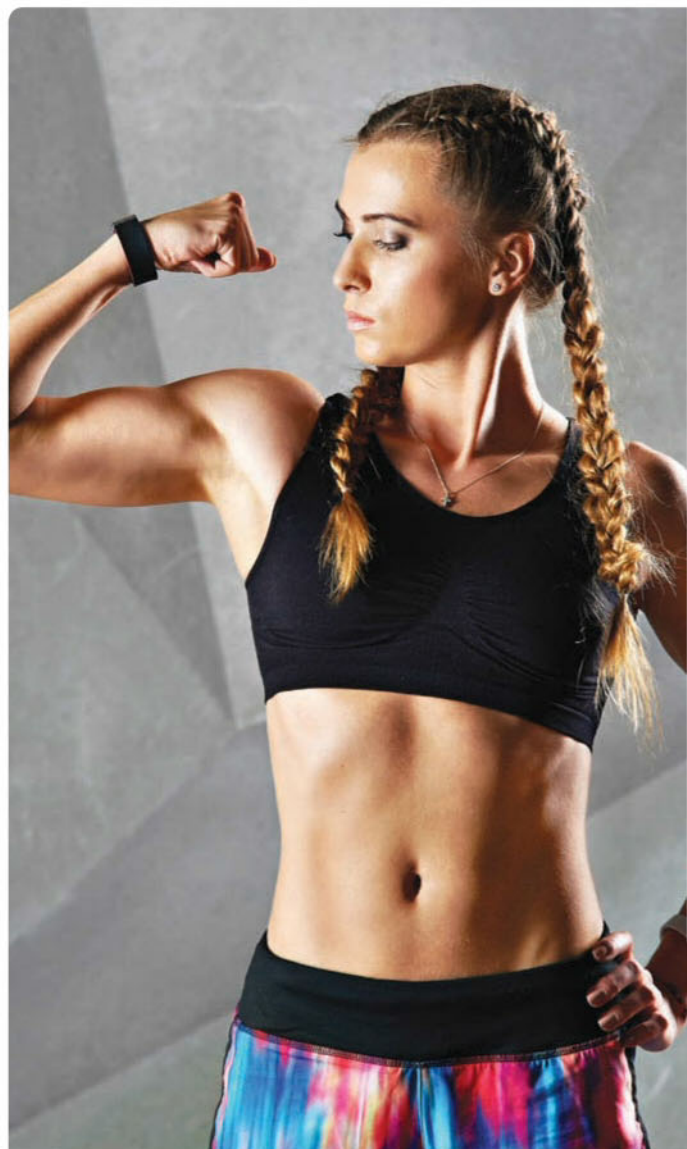
CORNETTS
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March 2015



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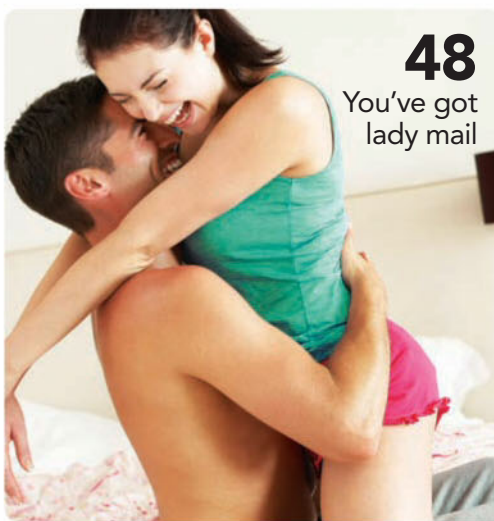
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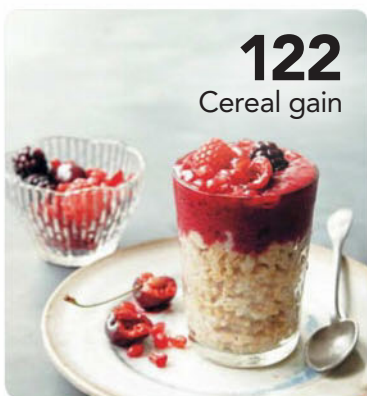
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This month's theme got me thinking about whether there could be such thing as DIY addiction. I don't mean gorging on personal growth seminars or even compulsively turning Malm shelves into mid-century secretaires (*a-hem*, Ikea hackers), but the kind of 'fierce independence' sanctioned

by complimentary tropes such as 'stand on your own two feet' and the *outtamyway* mentality of generation CrossFit. On one hand, doing something under your own steam can fuel a broader sense of efficacy – there's nothing like nailing something tricky to make you feel kick-ass empowered (get your ready-to-assemble self-scaffolding on p. 32). But as with all good things, there's a tipping point. My cautionary DIY tale involves a six-hour emergency Sunday salon consult after I accidentally dyed my waist-length blonde hair darkest brown (read: Mortisha black), closely followed by a missing tax return when I overestimated my accounting acumen. (On the flipside, I did successfully secure a rogue bumper to the boot with a plimsoll on a road trip and replaced the toilet lid after using it as a mirror step – in stilettos.) Fast forward a few years – and a fair number of hours re-routing beliefs about being vulnerable – and I'm glad to report that sobriety from needlessness can be surprisingly empowering; in my humble post-silo opinion, asking for help is a hallmark of strength, not weakness. It gets better. For me, realising that martyrdom does not translate to more respect – or self-confidence – has neatly coincided with greater personal and professional success (go figure). In hindsight it makes total sense – aside from filling knowledge and skills gaps, standing on the shoulders of giants fosters a sense of connectedness in a way stoicism doesn't (well no-one's going to confide in a know-it-all). And how much more satisfying to celebrate deficits as opportunities to learn than convince yourself you've got all the answers (to retire from curiosity and wonder would be tragic, in a waste-of-life sort of way). With that balance in mind, this issue promotes a kind of augmented DIY. Beauty ed Jo shows you how to perform salon cosmetic treatments at home (and circles those you should outsource), p. 56. Likewise exercise. If you're across your major muscle groups, learn to write your own pro-grade fitness plan (p. 68); otherwise go hybrid self-pro-help with Nikki's mix-and-match workouts (p. 80). To steer you past dubious exercise counsel to sites that can help you to help yourself, we've rounded up some of the web's best qualified fitness bloggers (consider it harm minimisation for Instagram fiends). Same goes for contemporary nutrition protocols such as sugar-free and intermittent fasting, which have spawned a peer-to-peer web of disinformation sharing. We've asked leading diet pros how to reconcile pop foodologies with sound nutrition (p. 100). Last but not least, we've taken a ruthless torch to self-help, sorting useful personal development, yoga and meditation movements from those with ignoble motives (p. 38). If you have any questions, I'd love to hear them. (I mightn't know the answers, but I can probably find someone who does.)

Wishing you an interdependent month,

Rebecca

Rebecca Long // Editor



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EDITORIAL

EDITOR Rebecca Long
rebecca@blitzmag.com.au

EDITORIAL ASSISTANT Madeline Lakos

ASSOCIATE BEAUTY EDITOR Joanna Barry

MANAGING EDITOR Ben Stone

CONTRIBUTING WRITERS

Stephanie Osfield, David Goding, Nikki Fogden-Moore, Evelyn Lewin,
Charmaine Yabsley, Nicola Davies

ART

ART DIRECTOR Javie D'Souza

GRAPHIC DESIGNERS

Adibowo Rusli, Lysha Moniz, Diep Nguyen,
Adam Summers, James Steer, Zeenia Lakhani, Jonathan Rudolph

DIGITAL & ONLINE

HEAD OF DIGITAL STRATEGY Alison Adey

SENIOR WEB DEVELOPER David Ding

APP MANAGER/MARKETING Karl Nemsow

WEB DESIGNER Amanda Oliver

VIDEO EDITOR Justin Oleyar

ONLINE CONTENT PRODUCER Zach Broadhurst

PHOTOGRAPHERS

COVER IMAGE

Model: Rachel-Jennifer Joson

Photographer: Wendi Satio // satiophoto.com

ADVERTISING SALES

NATIONAL SALES DIRECTOR Wendy Berry

GROUP MANAGER - NATIONAL ADVERTISING Keith Rozario

SALES COORDINATOR Elizabeth Forrester

NATIONAL ADVERTISING MANAGER Shaaron Martin

shaaron@blitzmag.com.au

MARKETING

MARKETING & EVENTS MANAGER Linda Higgins

linda@blitzmag.com.au



BLITZ PUBLICATIONS
& MULTI-MEDIA GROUP PTY. LTD.

CHIEF EXECUTIVE OFFICER Silvio Morelli

GENERAL MANAGER Natalina Burley

CHIEF FINANCIAL OFFICER Stefanie Morelli

ADMINISTRATION & CUSTOMER SERVICE

FINANCE Min You

SUBSCRIPTIONS MANAGER Angelina Modica

CUSTOMER SERVICE Frances Ricchetti, Robyn Newman

Email: customerservice@blitzmag.com.au

Phone: (03) 9574 8999 Fax: (03) 9574 8899

PO Box 4075, Mulgrave, 3170

Web: www.womenshealthandfitness.com.au

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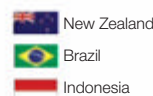
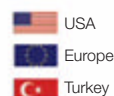
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JOANNA BARRY

Associate Beauty Editor



JONATHAN BROWN

GP/cosmetic physician
(cityskin.com.au)



SARAH MCMAHON

Psychologist /
Body Image Expert
(bodymatters.com.au)



MOVE IT



NIKKI FOGDEN-MOORE

WH&F Head Trainer
(thevitalitycoach.com.au)



NICHELLE LAUS

Trainer
(nichellelaus.com)

FUEL IT



MELANIE MCGRICE

Accredited
Practising Dietitian
(melaniemcgrice.com.au)



LUCINDA ZAMMIT

Nutritionist
(lucindazammit.com.au)

MEDIA



JAKE EDWARDS

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TONGUE DIAGNOSIS

It's not foolproof, but these common oral symptoms can hint at health issues.

Smooth/beefy: vitamin B12, iron or folate deficiency; **anaemia**
Black: fungal overgrowth from prolonged antibiotic use
Longitudinal furrows: Syphilis
Ulcer: Crohn's disease; colitis

METABOLIC GROUPIES

Your blood group could be the best heads-up yet on whether you're likely to develop type 2 diabetes, suggests a study of more than 80,000 women published in *Diabetologia*. The link? Blood type might influence inflammation markers, for one. Gut microbe composition, related to metabolism, is also linked to blood group according to a recent paper. Blood groups were compared with type O-, which is least likely to develop the condition.

DIY risk assessment

Type B+.....35% more likely
Type AB+.....26% more likely
Type AB17% more likely
Type A10% more likely
Type B-; AB-.....no significant added risk

TO PREDICT YOUR HEALTH STATUS

(like a weather app, but more useful)

MIGRAINE >> BELL'S Palsy

Migraine headache may double the risk of incurring nervous system condition Bell's palsy, which causes facial paralysis, a study published in the American Academy of Neurology's journal reveals. Headaches are the most common nervous system disorder and the two conditions may share a link. Most people with Bell's palsy recover completely.

INSOMNIA >> BACK PAIN

Insomniacs are almost 150 per cent more likely to encounter back pain at some point than sound sleepers according to a new study conducted by the University of Haifa. Worse news: women are harder hit than men. Around half of back pain sufferers also experience insomnia, which is known to increase pain sensitivity. One possible link is stress, which could cause chronic restlessness and perpetual muscle tension, culminating in back pain.



ODD MENSTRUAL AGE >> CARDIOVASCULAR DISEASE

If you met Aunt Flo before your 13th birthday or from 17 onwards, you could be at higher risk of developing heart disease, stroke, and complications of high blood pressure. Based on 10 years' observation, a study in the American Heart Association's journal *Circulation* found that the findings held whether candidates were lean or overweight and smoked or not. The risk premium was subtle, researchers said.



JUDGE
& JURY

The case: A cautious personality can lead to poor physical health. Theory goes that evolution may have programmed less outgoing types to be less resilient to illness because, let's face it, there's not much chance of catching cooties on the couch in your tracky dacks.

The verdict: Degree of extraversion and conscientiousness are linked to differences in immune cell gene expression according to a study of five personality factors by researchers at the University of Nottingham. In a study, extraverts' immune systems appeared to be better equipped to deal with infections than introverts'. Illness resistant genes synched with the personality trait of 'openness'.

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The number of times lower the doses of resveratrol can be than official recommendations to benefit health. The compound produced in grapes and cacao beans has been linked with longevity, but previous research found that doses needed to be exceptionally high to activate an evolutionarily ancient stress response in human cells according to experts at The Scripps Research Institute (TSRI). **In practice:** a couple of glasses of red wine every now and then yields enough resveratrol to activate the relevant pathway.

WHAT'S WORSE?

SALT V SUGAR

SUGAR. We're not talking fresh fruit, but added sugars in packaged foods have a bigger case to answer in high blood pressure and heart disease than added salt, Ohio State University research shows. Fructose – found in some diet shakes – was worst for hypertension risk.

DO IT: Keep fructose to less than 74 g a day and avoid added sugars where possible. If you can't blunt your sweet tooth, get into healthy desserts made with stevia and cacao.



CARBS V FAT

CARBS. You could almost triple your saturated fats and leave your blood relatively unscathed, but increasing carbs drives up blood levels of palmitoleic acid, a fatty acid linked to diabetes and heart disease risk, Ohio State academics found. Palmitoleic acid dropped with lower carb intake and rose when carbs were reintroduced. Basically, an

increase means more carbs are converted to fat instead of being burned as fuel.

DO IT: Reduce carbs and add fat to ensure the body efficiently burns saturated fat rather than storing it. Low carb is 50 to 130 g carbs daily and 10 to 26 per cent of calories while high carb test subjects consumed 55 per cent of their food in carbs.

Tipping point

The timing of cancer sufferers' diet changes can determine whether their meal plan inhibits or fuels tumour growth according to a study at the University of Geneva. A common mutation in lung, pancreas and colon cancers respond to changes in calorie intake – for better or worse. If a sufferer starts a high-calorie diet before the mutation, the diet can have anti-tumour actions, while increasing calories after mutation promoted tumour growth. Reason? The metabolic changes from a shift in calorie volume.

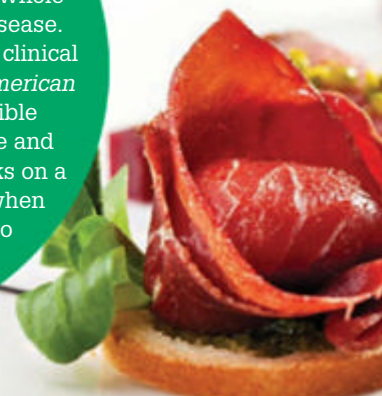


GI JANE

If you're chowing down on fruit and veg and laying off the lollies, don't stress about the glycaemic index of whole foods causing diabetes and heart disease. Despite contrary previous research, a clinical trial reported in the *Journal of the American Medical Association* found negligible differences between blood pressure and other disease indicators in five weeks on a high or low glycaemic index diet when calories were equal. (Still a no to lollies for brekkie.)

Undereat, anti-age

Those shmancy main courses with a speck of food embraced by miles of plateage might tack a few years onto your life (and face). Whispers about calorie restriction slowing ageing have been consolidated by research showing sub-par kJs while consuming adequate nutrients increases the body's production of hydrogen sulfide (H₂S) – associated with longevity in worms, flies and yeast. (It's the wonder ingredient in mineral springs.) Harvard School of Public Health researchers suggested that the mild oxidative stress caused by dietary restriction had a protective effect. A warning: taking amino acids methionine and cysteine, both of which contain sulfur, cancelled the perk.



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80%

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Heading straight for the choccie drawer

THE FIX:
When your brain clicks onto a food, think of its health merits. Some people's brains take longer to move from taste thoughts (the ones we automatically have first) to more abstract perks like healthfulness, leaving room for error. A study published in *Psychological Science* suggested that by consciously switching the thought order, flavour mongers could buy you time to reconsider. What regret?



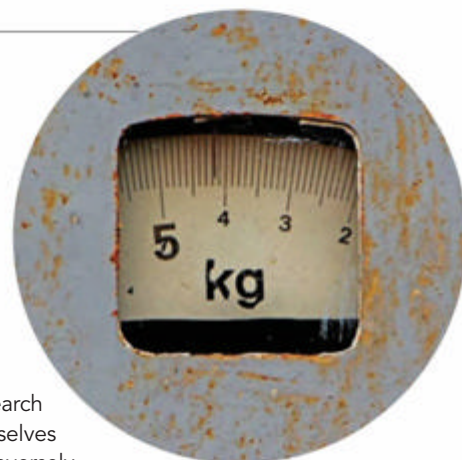
Binge pill

Binge eaters might find relief in an Alzheimer's drug, which has been shown to reduce impulsive behaviour according to a Boston University School of Medicine study. Neuroprotective med Memantine could directly apply memantine to the brain's reward centre, which researchers found blocked the strength of cues associated with junk food and the compulsivity associated with binge eating.

IT'S A THING

WEDNESDAY WEIGH-INS

To weigh or not to weigh, that is the question we thought we'd answered (everyday weighing will only make you obsess and regular scales aren't smart enough to tell what's fat and muscle or water). But we'll chew our words while we report that recent research found that dieters who weighed themselves more frequently lost more weight. Conversely, the review of 40 overweight people's 12-month case notes revealed that those who went longer than a week without weighing gained weight. Experts conceded that weight zigzags during the week but promoted daily weighing for weight loss. For a weekly take, try Wednesdays, when weight readings are most accurate. (When you've used up the glycogen from Saturday's toast-fest, we're thinking.)



SPEED CHEAT

New intel on cheat days: keep 'em short. Eating the occasional sweet, high-fat treat could help to prevent a binge – but only if the episode is shorter than 24 hours. According to University of Calgary research, while insulin released in response to ingesting sweets excites the brain's reward mechanisms, it also flicks its own kill switch, producing satisfaction chemicals called endocannabinoids, meaning that an hour after eating cakey stuff, you're caked out. But in a rat study, after a 24-hour dessert spree, endocannabinoids failed to release, causing animals to seek out and consume more palatable foods. Worse news, the effect lasted for over a week.



Where does lost body fat go? Heat and energy were the standard answers among 50 per cent of doctors, dietitians and PTs surveyed for a UNSW study. Merrrrrr. In fact, missing mass is breathed out as carbon dioxide, in contravention of the law of conservation of mass. Bad news is that you can't over-breathe to speed things up; you'll only hyperventilate, get dizzy and possibly lose consciousness.

LOST 10 KG OF SQUISHY STUFF?

When you lose 10 kg of fat
8.4kg – carbon dioxide exhaled through lungs
1.6kg – becomes water, excreted in urine and sweat

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HEALTH PRODUCTS

HIIT at Home

Flesh-baring season might be almost over, but that's no reason to turn into a couch potato. Instead, turn the couch into a workout zone. The Daily HIIT blog has got a whole range of no gym, no problem workouts that can be performed around the coffee table. Move the flat white first.

dailyhiit.com/hiitblog



OLD/NEW

✗ OLD WAY

Balancing long cardio sessions with weights training

Why it won't work:

Blame the concurrent training effect. Concurrent training is a fancy term for training with a combo of endurance exercise and resistance (weights) exercise. The gist is that strength and endurance can be developed simultaneously to a certain degree, but past that point endurance training will take a toll on your strength. Hello exhaustion, goodbye gains. Research published in the *European Journal of Applied Physiology* estimates that it takes around seven weeks of hard-core concurrent training before strength is affected.

✓ NEW WAY

The best way to work on both strength and endurance at the same time is to do a strength session immediately after a low-intensity, non-depleting endurance session according to a recent study published in *Sports Medicine*.

YA BOOZE, YA LOSE

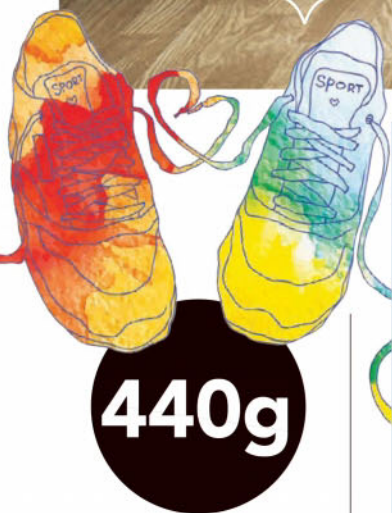
Think a pre-girls night workout means you can scoff cocktails scot-free? Harsh reality check: after-gym boozing reduces muscle growth by up to 37 per cent according to a recent study published in *Plos One*. Good news: consuming more than 20 grams of protein post exercise and pre-happy hour slashes that to 24 per cent.



Selfie style

If you must take gelfies (selfies that make it look like you're about to or just gymmed, whether it's true or not), at least put a little thought into your kit.

We're a bit in love with the exclusive prints in Sara Crave sportswear's Storm collection. (You'll never rock up to an Instagram feed wearing the same thing as anyone ever again.) Tights \$79, saracrave.com.au



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TRENDING

LIP CRAYONS

Colour, check. Lip conditioner, check. Lip balmy stickiness and cakey pout (what, are you playing dress-ups?), uncheck. This autumn, scribble me this.

WANT IT

NATIO SMOOTHIES: In eight shades, these are free from parabens, mineral oil and carmine. They also contain moisturising shea butter and jojoba oil. \$12.95, natio.com.au



CLINIQUE CHUBBY STICKS: In 16 different shades, they're loaded with scrummy mango and shea butters. \$35, clinique.com.au



BURT'S BEES LIP CRAYONS: In six shades, these are flavour and fragrance free. The kendi and jojoba oils keep chops extra smooth and smoochable. \$16.95, burtsbees.com.au



Beauty case space

We're way too grown up and responsible to recommend frying yourself in coconut oil a la Mum's 1980 Merimbula trip. But we do suggest kidnapping the co-oi from the kitchen and packing it for your next getaway to save space in your beauty case. Coconut Revolution has turned the humble healthy eating staple into a serious – and organic – bathroom multi-tasker, taking the place of moisturiser, make-up remover, chap stick, hair hydrator and nail serum. You can even use it as a shaving gel! Coconut Revolution Organic Coconut Oil Beauty, \$19.95 (420ml), coconutrevolution.com.au

DIY shortcut

If you're addled by the prospect of pairing skincare products that play well together (or just can't deal with a zillion products floating around your bathroom cupboards), cheat with a Get Started kit from Andalou Naturals. Each of the three kits is tailored to a skin type – oily, ageing or sensitive – and contains a cleanser, toner, mask and moisturiser (\$24.99, andalou.com). Insider tip: prep with an exfoliator like Sukin Organics Revitalising Facial Scrub (\$9.95, sukinorganics.com).

BESOTTED

GO-TO FACE HERO

They had us at the doll-size superhero cape (for the bottle) in the media box. But after testing Face Hero protective face oil from Zoe Foster Blake's Go-To line on an insomniac who sits under a vent and has skin more sensitive than a maximum security prison alarm, we can vouch for the 10 potent plant oils and antioxidants' hydrating, reviving and fine line/dark spot/dryness hiding. Just whack it under your moisturiser and go. (Perk for clumsy types: the bottle doesn't break if you throw it.)

Just saying.)

\$44.95 (30ml), gotoskincare.com



AESTHETE CHEAT

DERMA ROLLING

Administered using a cylindrical roller covered in hundreds of tiny needles to gently pierce the skin. Also known as collagen induction therapy (CIT), skin needling or micro needling, it aims to reduce the appearance of wrinkles, scarring and hyperpigmentation in place of chemical peels and treatments like laser resurfacing.

First impressions: Pushing the roller across the skin causes lots of tiny micropunctures, encouraging the release of platelets (the cells responsible for the regeneration of tissue and the storage of collagen and elastin).

While it sounds brutal, the even pressure gives it the soothing cred of a massage.

Try it: Awe Cosmeceuticals 0.3 millimetre Derma Roller \$69 awecosmeceuticals.com.au



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THE STICK: No spark

THE FIX: Be more responsive. It's one of the best ways to build intimacy, which fuels sexual desire according to a study published in *Personality and Social Psychology Bulletin*. Men perceive responsive women – you know, asking what type of birds when he tells you he builds aviaries – as more feminine and more attractive, researchers found. Not so in reverse. In fact, there was a mild attractiveness penalty for responsive men, with researchers saying suspicion over attempts to get close too quickly or perceiving interest as desperation could impair sexual attraction for certain women.

MUMMY ISSUES

Turns out you don't need to wait until the third date to tell how your Tindr match measures up in the bedroom. Asking about his relationship with his mum as a young'n and when he first fell in love could offer a heads up. So suggests a study at Prague's Charles University, which connected mum-son relations and puppy love with sex acumen. Answers: if he had a strained relationship with Mum or took longer to fall in love, he's more likely to suffer sexual dysfunction, researchers concluded. No firm conclusion on cause and effect.



28

The percentage of people who identify as bisexual who are open about it according to a Pew Research survey. Contrary to the free choice theory, the reason some women are open to sexual relations with their own chromosomal kind has been traced to higher levels of hormone progesterone in a study published in *Archives of Sexual Behavior*. The hormone produced mainly in women's ovaries contributes to the formation of social bonds by promoting friendly behaviour, researchers explained. They suggested that homosexual behaviour may have helped to cement alliances in evolutionary terms. Men with high levels of progesterone are also more likely to positively regard sexual relations with other men.

BOYO CHEM

Budding mums aren't the only ones whose hormones go haywire. Blokes also incur hormonal changes ahead of bub's birth according to world-first findings. Gunna-be dads experience drops in testosterone and estradiol, say University of Michigan researchers, who bookended previous evidence that men's hormones change in the daddy honeymoon phase. Testosterone is associated with aggression and parental care while estradiol is associated with caregiving and bonding.

IT'S A THING

Male idiot theory (MIT)

Term describing idiotic risk-taking behaviour known to be higher in men than women. Guys are more likely to be admitted to an emergency department after accidental injuries, more likely to be admitted with a sporting injury, and more likely to be involved in a fatal road traffic collision. Men's yen for yob behaviour could reflect typical differences in alcohol consumption, research suggests.



PHOTOGRAPHY: THINKSTOCK

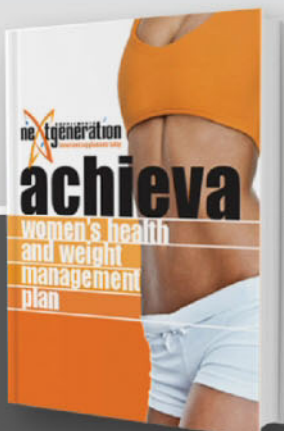
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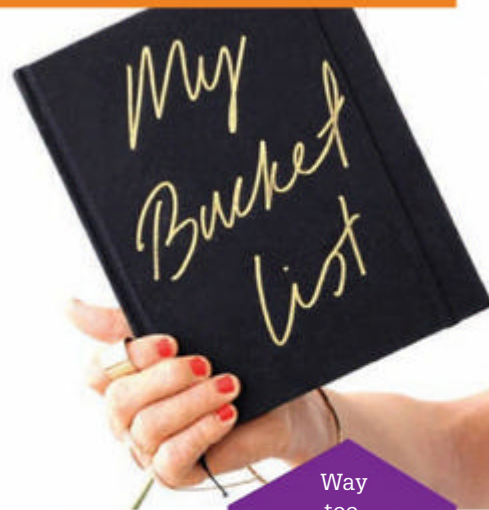
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GLASS CEILING

The quiet manager who eats lunch al desko with the door closed could cap your career potential – but only if you're an extrovert. Introverts are prone to marking extroverted colleagues down on performance and ignore them for promotion opportunities according to two US studies. (Don't expect her to endorse you on LinkedIn.) A study of 178 MBA students using a group situation found that introverted subjects favoured fellow introverts in peer performance evaluations while extroverts weren't swayed by personality type, the study published in the *Academy of Management Journal* found. Takeaway? Read the play and toggle your effusiveness. It might just net you a pay rise.



LIFE NOUS

Vintage crockery

Decorative plates are hot right now, but improperly sealed finishes can be toxic.

While lead glazes are prohibited in commercial tableware in Australia, according to the Department of the Environment, they can crop up in older bone china and porcelain, hand-made items and souvenirs from overseas. Particularly watch heavy-use items – bowls, cups,

plates – which can leach more quickly through glazes. Vessels holding acidic foods such as tea, coffee and dressing are also on the watch list. We love this painted, glazed Italian pottery by Sydney Albertini.

sydneyalbertini.com



TWO WAYS

TO UPSKILL

THE HOBBY COURSE: Online study is so 2014 (which makes lecturers, like, prehistoric). Academia's new guard dispenses courses by app on iPad, iPhone and iPod Touch. iTunes U includes half a million courses from primary school to university level. Students can also share course material with friends and stash their 'textbooks' in iBooks. There are also materials from cultural institutions such as New York's MoMA, if you just want to sound worldly. Free, itunes.com

THE VOCATIONAL COURSE: Ready to turn your passion into a new career? Take control of your future with the Sage Institute Fitness Diploma, which not only clues pupils up in everything from fitness and nutrition to motivation and mindset, but equips grads with marketing tools to optimise their qualification. We love the course's nod to contemporary training methods such as CrossFit (having Commando Steve as a school ambassador doesn't hurt either). For classes starting nationally, call 1300 664 664 or visit sage.edu.au.

Way too

much on your someday-but-I'm-scared list? Make it real by writing it down. This old school travel journal is one part dreams log, one part goals chart, one part commitment to making your bucket list happen (there's no backspace key in hard copy). As well as a blank bucket list of 101 items, there's a 'before' page to nut out what's held you back, space dedicated to questions from your head convo, slots for photos (hello selfspo) and interviews with inspiring people to get you from contemplation to action. \$39.95, sixthings.com.au



100-150

That's how many of your Facebook likes it takes to size up your personality according to researchers behind a study synching social media activity with key traits. Care factor? You mightn't realise you're broadcasting your neurotic/narcissistic/unhinged side to the HR manager of your dream gig. In a study of 86,000 people at Stanford University and the University of Cambridge, Facebook activity described people's personality more accurately than family and friends did against the 'big five' personality traits.

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NEUROLINGUIST

Unacknowledged shame

If you're ever on the run from the cops, bunker down with shame. Even people who feel shame stay poker-faced as no facial expression has evolved to give the game away according to experts. While people have long been ashamed of shame – yes Alanis, it is completely ironic – dwindling use of the word worldwide indicates that feeling rejected or inadequate is the new leprosy.

SHAME HUNT

Type: Overt shame

Symptoms: Involves painful feelings hidden behind terms that avoid the word 'shame'. Bodily reactions include blushing, sweating and/or rapid heartbeat.

Type: Bypassed shame

Symptoms: Involves fleeting feelings of inadequacy followed by obsessive and rapid thought or speech.

24-HOUR FIX

THE STICK: Negative thoughts playing on a loop.

THE FIX: Go to bed earlier. Lying awake whizzing down the worry superhighway can cause you to become overwhelmed by negative thoughts according to research published in *Cognitive Therapy and Research*. Findings suggest that going to bed late and sleeping for shorter periods puts pessimistic thoughts on a loop more than a good night's winks. No coincidence that sufferers of anxiety disorders, depression and OCD tend to both fixate on what-ifs and if-onlys and sleep less soundly. Earlier research linked poor sleep patterns with repetitive negative thoughts.

HAPPY PILL HIJACK

A paradoxical mood drop when people start taking common antidepressants has long frustrated health pros. Now researchers have traced the upside-down effect of selective serotonin reuptake inhibitors (SSRIs) to a dual signal in serotonin neurons. While the drugs boost happy brain chemical serotonin within minutes to hours of popping a pill, for the first two weeks or so, they suppress the noggin's glutamate, which is linked to pleasure and learning, researchers report in *Trends in Cognitive Sciences*. The good news is that it autocorrects quickly, allowing the meds to kick in.



JUDGE & JURY

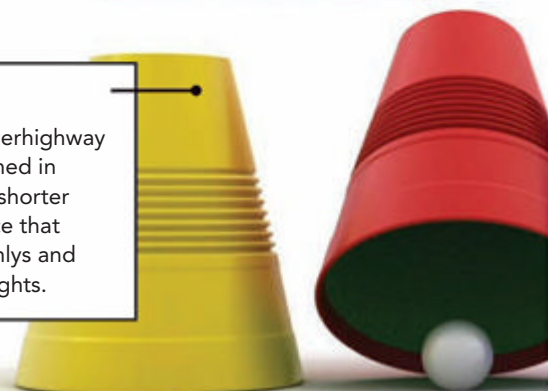
THE DEFENDANT: Havening Techniques

THE DEFENCE: Developed by US neuroscientist Ronald Ruden, the so-called psychosensory technique is used to treat sadness, stress, trauma and compulsions by combining activation of a past traumatic event with gentle touch applied to upper arms, palms and around the eyes. Theory is that it produces an 'extrasensory' response of safety much like a mother's touch at birth. Part three is distraction, which reportedly displaces the dredged event from working memory because the mind can't hold two thoughts simultaneously. Hypno celeb Paul McKenna says he's achieved profound things in thousands of cases.

THE VERDICT: Trials are thin on the ground. Studies do show that memories are particularly malleable immediately following recall and that being touched affects emotional processing. The composite? Maybe.

NONE DIRECTION

Need a GPS to find the letterbox? You might have weak signals in a part of the brain that tells us the direction in which to travel when we navigate. Research reported in *Current Biology* shows that the strength and reliability of 'homing signals' in the human brain can predict navigational nous. Last year a finding that mammals have brain cells that tell us which way they're facing and where to go won a Nobel prize.



PHOTOGRAPHY: THINKSTOCK

NEW

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Raw slim & tone protein:

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Raw
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Raw sugar
crave release



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Part of the **Raw** nutritional range

QUICK FIX

THE STICK

It's only Tuesday and you need a serious positive thinking kick to tide you over to Friday.

THE FIX

Find some grass and lie on it. A recent study published in the *Journal of Environmental Psychology* found that even short-term visits to urban parks and woodlands were associated with stress relief. While even subjects who took a break in a built-up area logged a reduction in stress hormone cortisol, urban breakers didn't log lower perceived stress relief as nature-going peers did.



APP-TITUDE

Google search for meditation studio left you feeling more confused than an ant in a sugar bowl? Dip your spoon in a few styles with these professionally produced phone apps. The most you'll pay is six bucks fiddy and you might even find DIY does the trick for you.



SMILING MIND: The psych pros at Smiling Mind have extended the app designed to get young people meditating to grown-up folk. The app starts with a body scan meditation based on your age. Then you can meditate when and wherever you like, clock up meditation minutes and unlock achievements. Free on iTunes and Google Play

HEADSPACE: The founders of Headspace want to create a healthier, happier world, one mobile device at a time. Their app includes 10 x 10 minute foundation meditations, rewards for meditating often and a buddy system so you can become mindful with a mate. After your foundation sessions, you can buy more meditations based on themes like relationships, performance and health. Free on iTunes and Google Play

BUDDHIFY: There is a meditation for every situation on Buddhify. Whether you're struggling to sleep, frazzled by travel or battling miscellaneous stress, there's something to help you relax and – cliché alert – live in the now. You can track your progress on generated stats and graphs and even choose from different voices for guided meditations. \$3.50 on Android, \$6.50 on iTunes.

Can-do candles

If you don't feel comfy at home unless there's at least one tealight flickering, chances are your habit is burning a hole in your pocket too. Instead of candle rehab, try a therapeutic craft afternoon of making your own. Queen B's Make Your Own 4 Hour Tealights kit brings the cost of a candle down to 25 cents an hour. And they're made with pure Australian beeswax, so there's no toxic paraffin and no eco-unfriendly palm wax. \$49.95 plus postage for 50 tealights. queenb.com.au



LIFE SKILL

DIY massage: FOAM ROLLER VS SPIKY BALL

So you can't afford to have Sven the soft tissue masseuse bunk in your spare room. Plan B is DIY massage, which you can do any time you damn well please. Self-massage using a foam roller or a spikey ball feels good, but it can also alleviate pain and prevent further injuries. Here's the rub.

THE STICK: Generalised pain or tightness; stretching fascia, or connective tissue.

THE FIX: According to physiotherapist Alex Lakos (sboydpt.com.au), you want a foam roller. "Foam rollers are great for stretching fascia, or connective tissue in the body."

THE STICK: Sharp pain, like a knot.

THE FIX: Spikey ball.



CAVEAT SELF-MASSEUR

"When you put pressure on a trigger point, it will hurt, but massage should never be so painful you can't tolerate it, so use less pressure if needed. If pain doesn't improve with self-massage, you should see an expert," Lakos says.



YOUR BEST
LOVE IT

Me Inc

Self-esteem. Self-confidence. Self-worth. They're the big three promised by selfie sticks, self-improvement seminars, social media and cosmetic surgery. But 'self' captured scientific and human fascination long before likes, shares, pins. Here's how it works and how to make being 'me' work for you.

Words: Stephanie Osfield



If we know nothing else about our self, at least we know it's not as good as it might be. We mightn't be able to locate it in space, but we know it's persistent. In fact, in Madonna's so-warbled material world, many of us happily assume that it's something to do with kudos, European cars, age-defying skin and how many people turned up to the wedding. Personal inadequacy is the very foundation upon which capitalism thrives; by cruel paradox, it just so happens that these industries need to first erode any vestige of self-belief that managed to thrive independent of having and doing.

"Unfortunately, modern media implies that beauty and thinness are the keys to happiness. This has led many women to mistakenly think that improving our appearance will nurture the 'self'," says Melbourne-based psychologist Meredith Fuller. "When this doesn't occur we feel empty and low," she says. "Because in

“MODERN CULTURE HAS BECOME OBSESSED WITH HOW TO MAKE YOURSELF INTO A BETTER VERSION OF YOU, which has caused an unending self-improvement quest to become sexier, cleverer, more successful or more sculpted”

reality, a healthy sense of self relies on many other factors, including authenticity, connected and intimate relationships, a job that fits our passions and morals and altruism, where we give to others."

In the social media age, where followers, shares, likes and pins are unquestioningly coveted as surrogates for self-esteem, we're more fragile and insecure than ever. "Our brains are under the influence of an ever-expanding world of new technology and medication," says Oxford University neuroscientist Susan Greenfield, author of *Mind Change: How Digital Technologies are Leaving Their Mark On Our Brains* (Random House, \$35). Greenfield believes that technology and pharmaceutical drugs are changing the micro-cellular structure and complex biochemistry of our brains, altering not only our personality and behaviour but also our human identity and, as result, potentially diminishing our sense of self. "Social media can cause lack of empathy and increased aggression," Greenfield says. "If you overly rely on social networking you are out to entertain and seek approval and construct an artificial identity that's not really you at all." Greenfield's conclusion? That this artificial life is making us feel isolated, disconnected, unsupported and more anxious and self-critical while substantially damaging the health of our 'self'.

Scientists agree there is no one place in our grey matter where our sense of 'self' is located. It is created in many different parts of our brain that deal with everything from our senses (e.g. hearing and sight) to our emotions, via chemicals such as serotonin and dopamine. It is determined by how we were raised and by our genes, which can affect our inherited temperament. As your relationship with your 'self' has a major influence on your emotions, thoughts and actions, ensuring that it is in good shape is important. But nurturing your 'self' involves far more than simply boosting your self-esteem. It also involves an understanding of the many different faces of the 'self', how they influence your thoughts, presumptions, anxieties and responses and how you can boost each one if any of the following facets of your 'self' is undernourished.

Sense of self

This is based on experiences from childhood to the present and the roles that you play in life, at work, as a partner, a girlfriend, sister or daughter or mother. If you have a sturdy sense of self, you may find it easier to set boundaries in relationships, go for the promotion you want or take a calculated risk such as asking someone out or starting a business. If your sense of self is not clear or strong, you may tend to make decisions based on what others close to you think and want, particularly in romantic relationships. Over time, this can cause you to lose touch with what you need in life to be fulfilled and happy.

Sense of Self SOS:

- **Express your opinions:**

"Often we give over to the opinions of others because we want approval," says Fuller. "Mistakenly, we think that differences of opinion and interest signal discord and will provoke confrontation. In fact differing tastes, values and attitudes are a healthy sign of emotional vitality and should be acknowledged and embraced."

- **Avoid passive attacks:**

That means you should:

» Say what you want: Be honest about what

music you want to listen to, what film you want to see and what restaurant you would prefer.

» Tell a story at a party without looking to others to agree with you.

- **Reflect on what you want and need:**

Ask questions of yourself to enquire about what you enjoy in every aspect of life, from your social interactions to work. "As a result, your powers of discernment will grow," says Fuller. "This self-knowledge will make you clearer about what you need and want in life."



Self-esteem

This is often based on judgements, evaluations and ongoing mental progress reports about how we shape up in comparison to others. If you feel you rate high in intelligence, beauty and body shape, your self-esteem is likely to be healthier. If not, you may feel gloomy about the future and be intensely self-critical.



Self-esteem SOS:

- **Stop making comparisons:**

"We often mythologise the people that we compare ourselves with," says Fuller. "We fail to see their hang-ups and faults and assume that they are supremely confident and happy. Ironically, in the end we're trying

to copy a person who doesn't actually exist and in the process we make ourselves uptight and miserable."

- **Celebrate your achievements:** After years of promising yourself you'd learn to ski you've booked

your first snow-bound holiday. Don't spend the entire time thinking about how many times you've fallen over or how ridiculous you must appear to the ski instructor. Concentrate instead on how much you've been looking

forward to this experience and how bravely you're getting up and having another go every time you fall down. Fulfilling any achievement involves hundreds of deliberate steps towards your goal and they should all be acknowledged.

Self-image

This perception of yourself is tied to what you feel others think of you. It is also influenced by your personality and whether you're an introvert or extrovert, as well as the standards you set yourself; for example, whether you're a perfectionist, a high achiever or whether you are laid back and tend to roll with the punches and are not easily stressed or fazed. If you have low self-esteem, you come home from a party and worry that you spoke too much or said something stupid. At the heart of this is a deep-seated fear that somehow you don't measure up or that people see your failings and think less of you.

Self-image SOS:

- **Cut back on social media:**

Stop checking how many friends or followers people have. Don't believe the hype. Remind yourself that what people post is based on the image they want to portray, but may be faked or embellished.

- **Treat yourself like a**

friend: Are you always hassling yourself for not being gorgeous, smart or motivated enough?

"I ask women, would you put down your daughter, best friend or mother in this way? Of course not – so it's obviously not okay to say these things to yourself," says Sydney psychologist Jacqui Manning. "In the long term, critical self-talk can destroy self-respect and damage your self-image."

- **Motivate the right way:** Work out or lose weight to invest in a healthier, longer

life, not because you hate your body.

- **Pat yourself on the back.**

Do this when you finish that report at work, donate clothes to charity or stay on a health kick for the week. It will help bolster your self-esteem.

- **Accept compliments:** Say

'thank you' and avoid putting yourself down.

- **Think beautiful:** Walk, talk and relate as though you're that latest 'it' girl or you're channelling Audrey Hepburn, and that's how you will feel and appear.

- **Do a personal self-**

audit: Write a list of at least 10 things that you value and appreciate about yourself. Ask a friend and your partner to write a list of 10 things they love about you and write a list for them. Finally, write a list of the things you don't like about yourself and re-frame them in a more positive way, e.g. "I am shy but that makes me a good listener."

"When you notice your talents and abilities, over time you will come to realise that you have all the qualities that you admire so much in other people and that the only problem has been your inability to celebrate your own strengths and attributes," Manning says.



Self-acceptance

This can only occur if you love yourself unconditionally. It can be a relief to nurture this part of your self because it allows you to simply be, free of any difficult or unrealistic checklist of what you need in order to be worthy or valuable or desirable. When you are self-accepting you are not obsessed with seeking approval (of others or yourself). This allows you to be more natural, less self-conscious and less pressured about constantly having to renovate yourself to live up to 'ideals'.

Self-acceptance SOS:

- **Don't be a mind reader:** "Stop trying to second guess what others think of you and assume that they like you until proven otherwise," says Fuller. "Tell yourself that you don't need approval in order to feel worthwhile – remind yourself that you are a valuable person for who you are."

- **Stop judging yourself:** Talk to yourself with kindness and approval:

Old You: "I'm such an airhead."

New You: "I wasn't concentrating."

Old You: "I look like a fat cow so I'm not wearing a bikini to the beach."

New You: "One-piece swimsuits flatter my figure better and play up my breasts, so I wear them to the beach now."

Old You: "I'll never get the job, so why bother applying?"

New You: "I'm going to apply and even if I don't get the job I'll get better at doing interviews."

Old You: "He didn't call back because I completely bored him".

New You: "Clearly we didn't connect well, so it's a good thing he didn't call back."

Old You: "I'm such a klutz. I'll probably trip over when being a bridesmaid."

New You: "I'm looking forward to being a bridesmaid and it's flattering that my girlfriend wants me in that role and clearly thinks I will do a great job."

- **Love your body unconditionally by:**

- » Banishing your scales to the garage or closet and only weighing in once a week.

- » Getting rid of all the clothes you've been holding on to just in case you ever manage to lose 10 kilos – they remind you of what you're not instead of celebrating what you are.

- » Looking at other women. Notice how real women come in all shapes and sizes. "Look for attractive women in a crowd who have large builds or unusual but compelling faces – if you find them appealing you can surely learn to see yourself as attractive as well," says Manning.

“TECHNOLOGY AND MEDICATION COULD BE ALTERING OUR HUMAN IDENTITY and as a result, our sense of self could be diminished or even lost.”

Self-worth

This is firmly linked to identity, which dictates how we navigate and respond to many different aspects of life. It may alter during changes such as the end of a relationship or becoming a mother. It may also flip-flop at different times depending on what's going on in our romantic relationships, family and work life.

Self-worth SOS:

• **Dissect your responses:** List the situations and emotions that link up to trigger behaviour that you would like to change, such as:

- » Partiesanxiety/shy
- » Encounters with bossfear of conflict/
bumbling
- » Family outings.....low self-esteem/
aggressive
- » Houseworka willingness
to please/too
accommodating
- » Work meetings.....the need to be
noticed/dominating

Beside each point write a list of how you would prefer to be regarded, such as more assertive/less accommodating, spontaneous, laid back, dependable, in control

• **Be a goal setter:** Break your goal of writing a novel or taking a long overseas trip into smaller steps, such as setting up a savings account for your travel. Follow through on your plan of action. "Goals can help you feel uplifted and more purposeful and in control of your life," Fuller says.

Self-concept

Your personality, family, birth order, experiences with friends at school and life events, such as a serious childhood illness or divorce, can all impact on your self-concept. If you label yourself or feel labelled by others, then your self-concept may be limiting and this can stop you from embracing changes that could lead to great experiences and new relationships and skills.

Self-concept SOS:

• **Take a few risks:** Sometimes great things can happen when you step out of your comfort zone or give yourself a new challenge – whether by trying a new sport or going to a new nightclub or taking off for the weekend. By breaking the routine and being a little spontaneous and unpredictable, you will be open to new experiences that will make you feel your life is more interesting and help you realise you're far more capable of coping with change and challenge than you think. "The more things you have a go at,

the more likely you are to find things that you do fantastically well," says Fuller.

• **Defy your label:** Change simple things in your behaviour so you and others see a different side of your true 'self':

» **Silent, stoic type** Be honest about how heartbroken your relationship break-up has made you feel then ask for support from friends and family.

» **Rescuer** Let your partner look through the papers and find his own job no matter how much you feel sorry that he's been laid off at work.

» **Conciliator** Don't offer to mediate between your two best friends when they've had a falling out.

» **Conservative** Buy an outrageous or sexy outfit to wear to your sister's big birthday bash.

» **Clown** Chill out and do some 'people watching', instead of feeling under pressure to be the life of the party.

» **Goody Two Shoes** Tell your mother the real reason you didn't make it to Sunday dinner – because you and your partner wanted to spend some

time together.

» **No Hoper** Stop putting yourself down in front of others and start telling them about that new promotion or goal to write a children's book.

• **Be Prepared for relapse.** Oh no! You've slipped back into old patterns of behaviour. Instead of hassling yourself, identify the situation and emotions that led to your relapse and think about what you could have done instead. "Then renew your commitment to act like the person you really are and want to reveal to others," says Manning. ■

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A fly is perched on the rim of a glass jar. Above the jar, a bright, glowing light source creates a large, soft, yellowish-orange oval shape against a dark background. The title text is overlaid on the dark background.

HIDDEN traps of SELF-HELP

(and how to find your perfect match)

Be your best, fulfil your dreams, boost your self-esteem – personal development programs have nailed the catchcries. But among the bona fide mentors are factions ready to prey on people's weaknesses. We tiptoe into the shadowy world of self-help.

Words: David Goding

There is nothing like the first quarter of a year to make possibilities seem both abundant and attainable. In the age of self-improvement seminars, your best is only ever a thousand-buck ticket away. Add the spin-off category of online and offline chest-beating, affirmation-chanting collectives – from e-courses to day-long lectures and meditation retreats – and the wannabe optimised human is spoilt for choice. She's also probably dazzled by gushing testimonials from past and present participants.

Welcome to the enticing, almost intoxicating world of self help and self-development. There's plenty of them out there, in various guises – from Landmark and NLP to Tony Robbins, 12-step paths to spiritual enlightenment and even Amway. All teach a different path to a common goal – unlocking your incredibly massive potential, and gaining a deep sense of self-satisfaction, money and belonging. But what you first see isn't usually the entire picture.

"We live in the age of self-improvement," says Dr Stephen Briers, clinical psychologist and author of *Psychobabble – Exploding the myths of the self-help generation*. "As we go about our daily lives we are subjected to a million messages – some subtle, and some less so – intimating that a happier, richer, more successful life is just around the corner. With the immediate survival needs of food and shelter taken care of for the majority, Western civilisation has now turned its attention to how much better it could all be."

"And this in turn has spawned a prolific, multi-million dollar industry of stadium-filling gurus, bestselling books, magazines and websites telling us how to be happier, thinner, richer, and all round better people."

But is all the self-help really helping? Are the personal development programs developing us? Is all the spiritual guidance really leading us to greater inner fulfilment?

Steve Salerno, the more than slightly cynical author of *SHAM – How the gurus of the self-help movement make us helpless*, doesn't believe the promises are being delivered.

"Self-help is an enterprise wherein people holding the thinnest of credentials diagnose in basically normal people

symptoms of inflated or invented maladies so that they may then implement remedies that have never been shown to work.

"The self-help movement has not been a wholesale failure. Here and there a marriage is saved, a parenting dilemma solved, a mental-health problem identified and eventually corrected as a result of advice imparted in a self-help product. Here and there. But for the most part, SHAM (standing for Self-Help and Actualisation Movement) does not do what it promises. It is the emperor's new life plan."

The lure

We're all searching for something. It might be for a new partner, greater wealth, a city apartment, inner peace or simply compulsively searching online shopping sites or Facebook friends for a little excitement or acknowledgment.

Indeed, you could put up a case that our very beings are programmed to search and that complete satisfaction is almost impossible to achieve. The very act of online searching, for instance, has been shown to give us a sizeable dopamine hit – for online flights, a discount restaurant meal, anything. Disturbingly, it doesn't appear to matter what we're searching up – it could be for something we don't even want – the effect is the same. We are all, essentially, suckers for the process of the promise.

One of the major selling points of most self-help/development/enlightenment methods/books/courses is the promise to simplify a complex life challenge into a manageable form.

"Ironically, of course, the appetite for these absurdly simplified models of our complex lives is greatly enhanced by the fact that modern life is becoming increasingly hard for us to get our heads around," says Dr Briers. "We move constantly between different contexts; in turns we play the roles of parent, partner, colleague, friend, carer, leader, member of the community, to name but a few."

"The rampaging growth of information technology now means that we are bombarded with more information and more competing demands on our attention than ever before. We are drowning in choice.

"The need to organise this chaotic flow of experience, to impose some kind



WEDNESDAY WARRIORS

According to stats gathered from its 300,000 members, studentcompetitions.com found that Wednesday is when most people's motivation peaks; it's the day we're most likely to strive for personal development and seek opportunities for self-growth.



of order on unruly chaos, is thus a universal and pressing one."

But it can take some serious searching to find what you want. In books alone there are currently around half a million books that qualify as self-help titles on Amazon.com. Self-help titles regularly top the best sellers list, which has authors and publishers alike dreaming of releasing the next 'secret'. Every year there are around 2000 self-help books published around the world. In the US alone, it's a \$650 million industry.

In anybody's language, that's a lot of searching.

Personal development

Personal development courses and programs take things to a whole new level. No longer is it truly 'self-help' – you're putting your trust and confidence in a teacher or a 'way' to guide you towards greater things.

A favourite 'problem', personal development programs highlight for the purpose of amplifying your sense of need and selling you a solution is self-esteem (the irony).

"High self-esteem isn't a luxury," says Jack Canfield, author of the bestselling *Chicken Soup for the Soul*. "It's a necessity for anyone who has important goals to achieve."

Landmark is one organisation

that has excelled at teaching clients to peel back the layers and uncover what is holding them back, throw away their old, negative interpretations of themselves and raise self-expectations, empowering people towards greater self-esteem and ultimate success.

On the journey they are encouraged to share their often emotional 'breakthrough', apologise to people they may have had an 'incomplete' or dishonest relationship with and, controversially, introduce others to their new world view. There's no doubting that, for many, it works.

But is high self-esteem really all it's cracked up to be?

"While the evidence is that increased self-love certainly does make us feel better, just like romantic love it can also make us blind, or at the very least a bit short-sighted," says Dr Briers. "In various studies, people with high self-esteem scores consistently rate themselves as more attractive, popular, socially skilled and intelligent than average. However, other people don't necessarily agree with them.

"Their self-ratings simply aren't upheld by the independent evaluations of their peers or by objective tests of their attributes and abilities. In other words –

shocking news, I know – simply believing something doesn't necessarily make it true. The science suggests that if our self-esteem is riding high, we might feel great, but we are probably also slightly delusional."

Then there is the all-important goal-setting platform, common to Landmark, NLP and just about every other personal development program on the planet. The idea is that achieving our personal goals will in some way make us happier. To realise them, NLP stresses the importance of using imagination over sheer willpower.

Unfortunately, most of us are not actually that good at knowing what we really want, and more crucially, don't seem to understand the value of the goal once we've set it.

"We may secretly anticipate that the new house we have set our heart on will make us feel great once we have the keys in our hand," says Dr Briers. "Fired up by this vision of our future pleasure, we set the appropriate financial targets, make the necessary sacrifices and watch with excitement as our overtime hours bring the cherished goal ever closer to fruition.

"Unfortunately, all the hard evidence of several decades of research suggests that your new purchase a) is highly unlikely

to make you as happy as you think it will and b) any pleasure that may come as a result will be more short-lived than you had imagined."

Alas, the disappointment doesn't stop at material goals.

"The truth is," says Dr Briers, "that when we make these judgments about what will make us happy, we get it wrong all the time."

Getting spiritual

As humans we are born to believe. And we're extremely good at it. Around 30 per cent of adults believe in astrology, for instance, despite its precarious credentials.

"Many who rubbish the notion of daily horoscopes can be heard exclaiming how someone is a 'typical Aries'," says Hugh Mackay, social researcher and author of *What Makes Us Tick?*

"Sceptics might be appalled, and so might many theists, but the continuing appeal of astrology shows how badly we need to believe in something that offers an explanation of why we are the way we are and, even better, a glimpse of what might happen to us in the future."

Not all our beliefs are as frivolous as star signs. In their quest for spirituality, some personal development organisations come close to becoming religions in their own right by hand-picking useful elements from psychology and other, more traditional, religions.

"The commercial self-help system that has most explicitly repositioned itself as a religion is Scientology," says Mackay. "Its founder, L. Ron Hubbard, developed a self-development program known as dianetics that borrowed some of the ideas of Freud and was essentially concerned with the relief of the lingering effects, the 'pain' of psychological trauma.

"Whether it is a 'religion' in the conventional sense remains a subject of debate, particularly because of the high fees charged

for its services. It doesn't appear to identify a god in the conventional religious sense, though its teachings – like those of Hinduism and Buddhism – include reincarnation.”

Humans also seem to have an irresistible urge to be led, particularly in the spiritual sense.

“The wildly irrational faith we sometimes have in

political leaders reminds us how vulnerable we are to our desire for something to believe in,” says Mackay. “From the Children of Israel’s faith in Moses as the man to lead them out of Egypt, to Germany’s unbridled passion for Hitler or America’s hysterical Obamania, history is littered with sobering examples of a psychological ‘virus’ that

regularly infects us when we turn too eagerly to a leader to deal with our own sense of powerlessness, uncertainty or insecurity.”

Into the mind

Psychology, spirituality and inner peace converge in numerous spiritual retreats that pull apart and selectively appropriate Eastern religions – particularly Buddhism. Many offer benefits to the cluttered, overstimulated mind, but some take advantage of the imparted vulnerability of participants.

Stressful conditions are commonly used in ‘extreme retreating’ in order to impart a range of strong emotions and connect you with fellow participants and guru leaders. On the way you may be guided through a variety of activities, including sermons, self-hypnosis, fasting, sleep deprivation and days of consecutive meditation – all in the name of ‘group awareness’.

All the camaraderie mixed with mindful bliss puts you in the perfect zone for peer pressure and a release of control that can send the steeliest mind spinning into irrational thought.

“People who embrace extreme or hardline belief systems sometimes find that they have unwittingly sown the seeds of destruction of their marriage or other relationships,” says Mackay. “They attend a weekend retreat to ‘find themselves’ and then discover that they have embarked on a longer and more demanding journey than their partner bargained for.

“Throughout the history of ‘awareness’ movements – whether religious, quasi-religious, mystical or flagrantly commercial – many people have come to the shocking, or simply sad, realisation that they have grown apart from their spouse or other loved ones.”

Getting real

All of this is almost enough to put you off self-help groups/

books/courses for life, but many do have noble intentions and some offer genuine help.

The trick is discernment. Start by doing your homework; does the author/teacher/guru have suitable qualifications? Check their history, search them out online, read reviews, make sure their evidence can be backed up and, finally, and importantly, ask yourself if it’s right for you.

You might want to consider working with a psychologist, counsellor or life coach on your self-help approach. They can offer guidance and support, suggest books and make sure you’re not going off the rails.

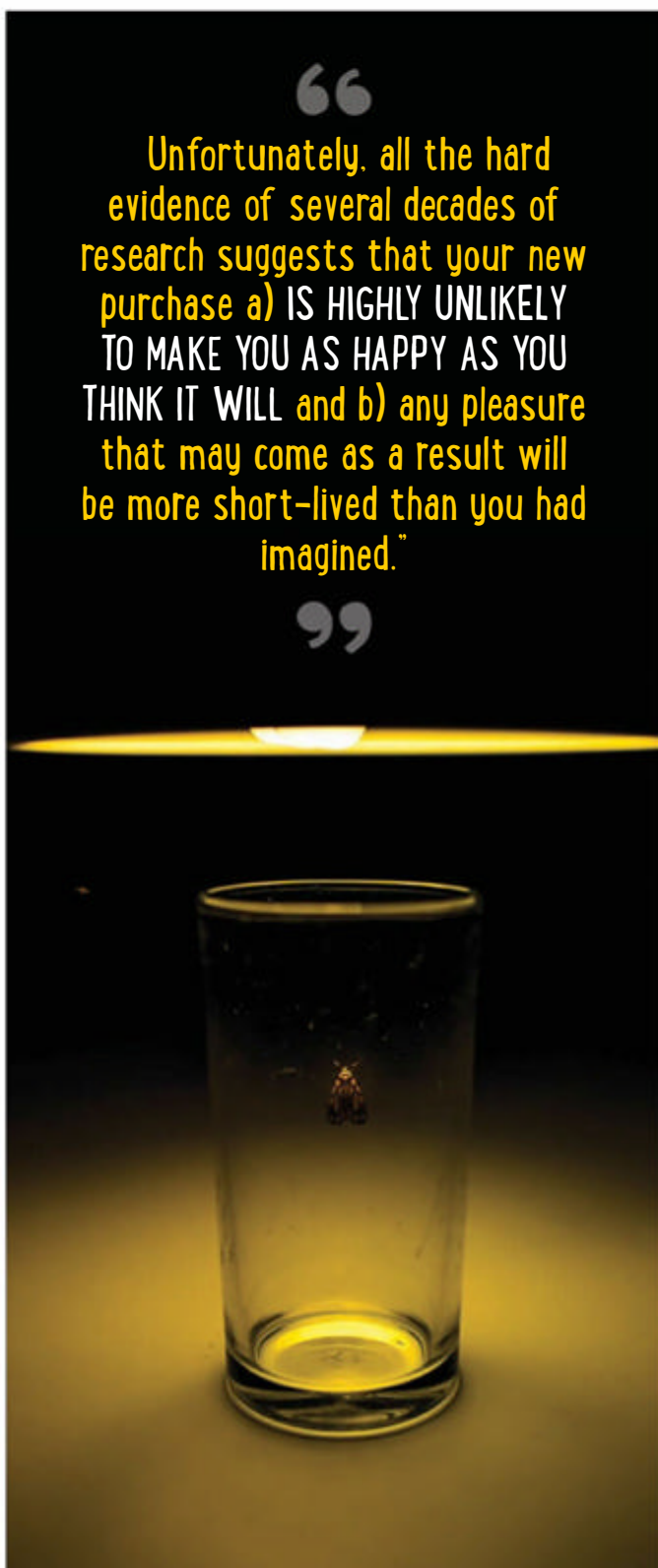
Numerous studies do suggest that self-help approaches can impart real benefits – particularly with depression, anxiety and even drug addiction – but more than 90 per cent of books and programs that fall under the self-help category haven’t undergone scientific evaluation – in other words, we don’t really know if they work or not.

One thing they’re unlikely to do, says Mackay, is bring lasting happiness.

“We are learning more about happiness and the conditions under which it is to be cultivated or, to be more accurate, we know more about the mental habits and behaviours of happy people,” he says. “Optimism, gratitude, the ability to be satisfied with ‘good enough’ rather than insisting on the best, being kind to others, not dwelling on past mistakes and imagining yourself as the best version of yourself you can be – all these attitudes characterise those of us who report greater levels of subjective wellbeing.

“What is also clear is that we need to stop trying to equate happiness with merely feeling good. Aiming for targets like ‘happiness’, ‘success’, ‘fulfilment’ is a recipe for disaster, because all of the evidence suggests such states are the felicitous by-products of a life well lived, rather than prizes that can be grabbed hold of in their own right.” ■

“Unfortunately, all the hard evidence of several decades of research suggests that your new purchase a) IS HIGHLY UNLIKELY TO MAKE YOU AS HAPPY AS YOU THINK IT WILL and b) any pleasure that may come as a result will be more short-lived than you had imagined.”





DIY rehab

Workaholic. Chocoholic. Instagramaholic. While dependency on ordinary behaviours is rarely life threatening, it can be more limiting than quips suggest. Here's how to DIY rehab.

Words: Dr Nicola Davies





The language of addictions is entering everyday lexicon. And while words such as workaholic and chocoholic are often uttered under the guise of conviviality – or considered OTT – the impact of dependency on legal vices draws parallels to addiction to drugs and alcohol. According to the *Diagnostic Statistical Manual of Mental Disorders (DSM)*, which prefers the term 'dependence', a behaviour is problematic when compulsive behaviours persist despite negative consequences for personal, social or occupational function. (As in eating a nightly Kit Kat despite accumulating kilos or checking Facebook twice a night when you know you'll flake at work tomorrow.) Bad friends and relationships can also become objects of dependence; ever wonder why you always seem to get walked all over?

Unlike necking a cask before midday, everyday behaviours don't qualify for rehab – at least not in the Hollywood Hills villa sense. With the increasing focus on self-

help and recognition that our brains are as malleable as Fimo, however, everyday habit-breakers are increasingly applying treatment protocols used in drug and alcohol dependency to sever ties with vices. Here's how to unhook yourself without a psych referral.

Is it an addiction?

The tricky thing about everyday activities as addictions is that they're socially sanctioned and, in moderation, are relatively benign. A flutter on the ponies or Witchery loyalty card is hardly rehab material. Which can make it near impossible to discern when a healthy hobby has detoured into destruction territory. The red flag, says Adelaide drug and alcohol abuse counsellor Alisha Hughes, is whether you feel you're making an active choice to engage in it. "Individuals who are dealing with addiction, in most cases, don't have control over what they are doing, taking or using," Hughes says. "They become dependent on it to cope with daily life."



Top 5 EVERYDAY ADDICTIONS

SUBSTANCES

This includes misusing and/or abusing cigarettes, alcohol, painkillers, food or even caffeine. (Nescafe-holic. Not so ridiculous.) It often starts as a way to cope with difficult situations or feelings and is especially common in impulsive personalities.

SHOPPING

If you shop 'til they drop (or overdraw), it's worth scrutinising what motivates your retail therapy. Being driven by a compulsive need rather than a functional one, and shopping more in certain emotional conditions (say, high stress), are common hallmarks of problematic shopping. Shopping addicts also tend to feel worse, not better, after a splurge – particularly if it causes financial duress. Bri Reilly, a compulsive shopper from Perth, says, "If I'm having a bad day, I go shopping; if I'm dealing with relationship problems, I go shopping; if a situation doesn't go my way, I go shopping. I use shopping to deal with any stressful situation in my life."

THE INTERNET

"I guess I spend way too much time on the Internet," says Jacki Reynolds from Adelaide. "I am addicted to Twitter and Instagram. I can't live without my phone and not having access to these applications." While spending time online can be productive, compulsive Internet use can interfere with daily life, work and relationships. If you feel more comfortable with your online friends than your real ones, or can't stop checking friends' updates, you could be addicted.

WORK

Checking work emails during dinner, holing up in the spare room with your iMac after midnight and cancelling social plans to finish reports are the marks of workaholism. While commitment and dedication can be positive (hello, career ladder and end-of-year bonus), there's a fine line. If you're living to work, not working to live, pull the brake and pin down what's driving you. If it's an unquestioned obligation,



quest for perfection or praise or to honour your folks' work ethic, it's time to make an active choice about what kind of life you'd like. Passively pursuing KPIs can be a compulsion, which often leads to burnout.

EXERCISE

Contrary to what images of fitness models and CrossFitters suggest, being uber-fit doesn't always connote good health. Exercise addiction (clinical term: anorexia athletica) can result in major physical fallout and psychological distress as sufferers chase (and fail to achieve) impossible perfection. The social side effects of favouring workouts over catch-ups with friends can diminish self-worth further, creating a snowball effect. Marion Maclean, a personal trainer and author of *Defeating Anorexia Athletica*, says her addiction caused untold devastation. "The disorder I developed was largely hidden behind the glitz and glamour of a healthy gymnasium," Maclean reveals. "I got hooked and soon became certified to teach, eventually managing a gym and working out 40 hours a week." Telltale signs include feeling that something catastrophic will happen if you don't work out, having a strict minimum duration/distance without regard for circumstance or your body's needs, feeling that your identity (and validation) depends on your regimen and athletic physique and feeling anxious or guilty until you've had your exercise 'hit'.

GAMBLING

Statistics from 2013 show that 2.5 per cent of Australians have moderate to severe gambling problems, meaning they're willing to risk something they value in the hope of gaining something of greater value. Unfortunately, gambling rarely leads to success and covering losses often spirals into depleted savings and, sometimes, stealing.

PORNOGRAPHY

There are all sorts of jokes about addiction to porn, but dependency is real and can leave relationships in ruins (if they ever get off the ground). The telltale sign? Spending extensive amounts of time watching porn, which escalates in extremity despite negative consequences such as domestic conflict or diminished work performance. Some sufferers find that their entire sex life is centred on pornography and they are incapable of being sexually involved with a real person without viewing pornography, which can ultimately destroy relationships.

Rehab

The notion of DIY addiction treatment isn't new, but since it attracted medical headlines in the early '80s, evidence-based self-rehab has been drowned out by more lucrative self-help approaches – hello *Chicken Soup for the Soul* and *The Secret*. In 1982, American social psychologist Stanley Schachter published ground-breaking research showing that many former smokers, overweight people and heroin users had 'recovered' without professional treatment. Indeed, success rates among 'self-changers' were often greater than for those receiving professional treatment. The common thread in self-help success stories is the SMART approach – an evidence-based framework for DIY addiction recovery coined in 1992. Short for self-management and recovery training, it rests on four pillars:



1. MOTIVATION

"An addict understanding that they have a problem is perhaps the easiest part," says Hughes.

"The most significant part of resolving a problem is having the motivation to change – having motivation to not only relinquish the addiction, but making changes that will affect their entire lifestyle and choice of friends."

When this motivation is present, many people are able to change addictive behaviour patterns through self-help and without entering formal treatment facilities.



2. RESISTANCE

With any addiction, relapse is a risk and therefore coping with your urges will be fundamental to your rehabilitation. Randy Lindel, a SMART Recovery facilitator, advises five ways to deal with urges to cave in to your addiction:

DELAY: The normal time that it takes for a craving to disappear is approximately 10 to 15 minutes. If you can delay giving in, the cravings will gradually reduce in frequency and intensity. This is also a great way to improve your confidence and motivation since you are proving to yourself that you are capable of overcoming the urges.

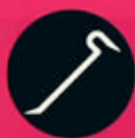
ESCAPE: If you are nowhere near the trigger that causes your cravings, you won't be tempted to give in to them. There is no shame in running away – it is necessary until you have firm control over your urges. Walk out of the shop to avoid buying anything. Remove your access to pornography channels. Unplug your computer and lock away your mobile phone.

AVOID: Avoid the triggers that

create your cravings. You might be able to avoid them until you are better able to delay your urges, but it might also be necessary to avoid them permanently.

DISTRACT: It's very difficult to think about two different things at the same time. If you make a list of distracting thoughts, you'll be able to divert your attention away from your cravings and into something more productive.

SUBSTITUTE: Substitute craving with something more beneficial. Exercise is a great form of substitution. Not only does it get you out of most situations where you may encounter a trigger, but it also improves your health. Alternatively, you could read a book, listen to music or get out into nature. Experiment to find what works for you.



3. UNTANGLING

While the obvious place to start is the problematic behaviours themselves, addictions are a bit like those necklaces you chucked in a drawer (how do they manage to tangle themselves?) As well as replacing behaviours, any lasting change demands a mission in disentanglement and developing skills in problem solving to reprogram responses to life's curve balls. Let's face it, it's all well and good to be Kit Kat sober when the going's good, but you also need to be able to deal with a shock credit card statement or break-up sans family block. This means identifying the root of your addiction, what triggers it, how it affects you, and effective ways to cope when you could rest on habitual laurels. Before you beat yourself up for buying ice cream after a fight with the boss, it's worth noting that many of us aren't equipped to deal with problems (if we recognise them at all). Enter cognitive behavioural therapy (CBT), which is sort of like long fingernails (in the jewellery analogy) and can be used to identify and solve problems.

1 Recognise that a problem exists by using clues in your behaviour or emotions.

2 Identify the problem itself (not the spinoff symptoms like being overtired...you want to call out the fact that you're working 14-hour days and, hopefully, why). You can't come up with a solution to an unknown problem.

3 Break the problem down into several smaller, more manageable problems.

4 Think of as many solutions to a single problem as you can regardless of how effective or ineffective they may be.

5 Once you have a list of possible solutions, you can think about all possible outcomes in order to select the most promising solution.

6 After you've negotiated an assistant with the boss or refinanced the car, reflect on how effective the solution really was and whether you could use it again.

The SMART approach uses the ABC problem-solving method, which helps you ask the right questions:

- » What is the Activating event – what happened and what did I think?
- » What do I Believe about the activating event – is it helpful or not?
- » What is the Consequence of this – on my emotions and behaviour?
- » Dispute my belief – what is the evidence to determine if my beliefs are true and what is really helpful to me?
- » Replace dysfunctional and self-defeating beliefs with Effective new beliefs that result in self-enhancing emotional consequences.

SHOULD YOU SUCK IT UP? PROBLEMISH

A SORT-OF PROBLEM YOU REASON YOU SHOULD BE ABLE TO PUT UP WITH.

If you're sitting there quibbling over whether your eBay habit really counts, plot a continuum with captured at one end and completely free at the other (if your hard drive crashed, would you get antsy with the computer tech, imagining missing your auctions?). What occurrences or cues exist because of where you're at (don't skip the massive mobile internet bill) tells you that that's where you are. Then make a mark where you'd like to be and describe what would be different there. Much like planning a journey, planning a change in behaviour requires a map. You need to know where you are and where you are going before you can plot your route. Writing down your motivations for wanting to break free can be a great reminder when the urge to give in feels insurmountable. Your journey starts now.



4. BALANCE

Dependencies are insidious. One minute you're happily

slotting e-tail therapy into the window between gym and work; the next, you're ditching lunch with the girls so you can splurge on a robotic vacuum. (Paradoxically, addictions such as compulsive emotional eating are often responses to either a perceived void or lack of self-space. Go figure.) Once you're in the grip of dependency, it's likely that you're pretty loyal – to it, not yourself. Trying to juggle compulsive behaviour with life obligations inevitably leads to stress – especially if you're trying to keep your vice a secret. Part of recovery is restoring some balance, which can be kick-started with a formal schedule. According to psychologist Dr Julie Myers, it is helpful to keep track of your sleep patterns, exercise, dietary intake and various other activities such as social events or time for relaxation. This will also make you more aware of the amount of time you spend on different activities as well as the

impact they have on your health and lifestyle balance.

Even mild addictions consume life and mind space you might – if you're brutally honest – fear you won't be able to fill. (Even if you never seem to have space for you. Told you it was tricky.) Setting goals can help to repopulate your life (and mind), so you've got something to look forward to rather than dwelling on what you're missing. If the prospect of non-addicted life looks empty, the neat trick is that setting a couple of goals tends to repopulate life as if by magic. Enrolling in Italian classes one day, drinking Chianti with classmates the next (what Kit Kat on the couch?). Another way to narrow your options is to audit your life for balance; is there anything missing (is there anything you'd love to do but never seem to find time to, like listening to music, baking or hanging out with a niece?)?. Once you've named a big goal, break it into daily goals and remind yourself every morning of what you want the day to be like and how you will achieve balance.



5. AWARENESS

Perhaps the most important aspect of attaining and maintaining a balanced lifestyle is self-awareness.

It's easier said than done when you're flat out like a lizard drinking, but set an email alert for key times during the day (mid-morning and arvo, for instance) to remind yourself to check in on how you're feeling and why. This will train you to reflect on how your mind's working at intervals, without prompting. In the early stages, use the alarm as a cue to write down what's happening for you internally (emotions, sensations, thoughts) and the outside circumstances (aggro email from a colleague or feeling pressured to take on more than is fair by well-meaning in-laws) as a way of identifying trends. Maybe conflict tends to trigger cravings, or there might be a clear link between fatigue and falling back on auto coping tactics or stronger compulsion. (Well?)

ARE YOU IN DENIAL?

(Trick question)

It's one thing to have an addiction – acknowledging it is another thing. (They don't call it denial for nothing.) Quite where you are in relation to nodding your noggin and biting the bullet is generally logged against a model of motivation known as The Wheel of Change.

1 PRE-CONTEMPLATION – Sure, your chocolate/shopping/Facebook habit might be hunky-dory, it might be – or you could be in this stage. “The first step to breaking free from addiction is knowing you have a problem, finding the source to the problem, and finding other ways to deal with the problem. I have seen many addicts successfully recover once they find alternative ways to handle and face the issues they are dealing with,” Hughes says.

2 CONTEMPLATION – Once you've slunk out of denial, you don't have to give it the flick. But you can evaluate the advantages and disadvantages of the addiction. (Let's face it, it serves some purpose. You might feel as though you kinda like it.)

3 PREPARATION – If you decide the cons outweigh the pros – enough to put up with the discomfort of practising new ways of being – you'll lay the groundwork for practical steps to change. This stage includes completing a plan with a timeline.

4 ACTION – You start to implement the plan and may seek support to make it stick, such as self-help, counselling or a support group.

5 MAINTENANCE – After a few months, you have managed to change your behaviour and your goal is to maintain your new *modus operandi*.

6 RELAPSE – Although not inevitable, relapses are a normal part of the change cycle and, if handled well, can serve as learning experiences with real growth value. Rather than trying to avoid relapse (and beating yourself up or throwing in the towel when it does happen), it can be useful to expect it – this allows you to prepare some relapse prevention strategies based.

7 TERMINATION – It might seem as though you'll never kick back and recount the days when you were beholden to a behaviour, but the steps for successful DIY rehab culminate in so-called 'termination'. In other words, freedom. ■

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YOU'VE GOT LADY MAIL

Words: Stephanie Osfield

Hormones are a bit like letters – you just tend to trust that they'll get to where they're going. But common factors such as stress, strict diet and OTT exercise can divert critical chemical memos with sizeable domino effects.

The endocrine system is a bit like the postal service; most of the time letters make it to the right address. But sometimes (like Christmas), processes get obscured. In the case of lady hormones, that's a bit like missing the memo that your speeding fine's on its way to the magistrate's court. The ripple effects can range from inconvenient (low energy, fluid retention and shady complexion) to dire (feeling chronically as though the world's out to get you).

There are two high-profile hormones in women's bodies,

which act a little like dictators – oestrogen and progesterone. “These sex hormones can be delicious substances that give you energy and vitality and yet they can also wreak havoc on your life,” says Libby Weaver, author of *Rushing Woman's Syndrome* (\$24.99, Little Green Frog Publishing). Oestrogen gives you curves and helps your uterus prepare for conception. Progesterone, which has mood-boosting and calming effects, keeps your reproductive organs at the top of their game and, after ovulation, also helps get your body ready for babymaking.

“Not only do hormones fluctuate throughout a woman's cycle, the rise and fall is substantial,” says Dr Sonia Davison, an endocrinologist and clinical fellow of the Jean Hailes foundation. “At the start of the menstrual period, there is a very low level of oestrogen. But by mid cycle it has increased 10-fold before falling down steeply again just before the next period. Meanwhile, as oestrogen levels are dipping, in the week before menstruation there is a huge decline in progesterone as well.”

You can also blame sex hormone levels for fluctuations in sexual desire. Little wonder factors that can obscure transmission such as stress, too little food and insufficient sleep often coincide with lack of interest in intimacy.

“If hormonal imbalances occur, they can influence everything from your libido, energy, fluid retention, complexion and cravings to your mood,” says Davison.

Like most internal happenings, hormone imbalance can occur and worsen without the hormone custodian even knowing it.



Excessive Dieting or Exercise

Being a gym junkie or eating like a bird, or doing both together, can cause havoc with your hormones. "Excessive exercise or inadequate food intake can lead to a condition called amenorrhea, where your periods completely stop because of a dip in important hormones such as oestrogen," Dr Davison says. Lower oestrogen can then cause a dip in your levels of mood-boosting hormones like serotonin and dopamine in your brain. Having less of those potent feelgood hormones can then leave you feeling less calm and more aggro, sad or unhappy. It can also completely slam-dunk your libido.

Hormone Help:

- **Eat a balanced diet:** Don't skip meals or cut your kilojoule count too low to ensure you keep your oestrogen levels stable. Remember that having the right balance of female hormones ensures everything from supple skin to a healthy sex drive.
- **Know when to stop exercising:** Do one workout at the gym, not three, avoid gruelling long-distance runs and don't train to the point of exhaustion.



Weight Gain

"Fat cells are active and produce hormones, including additional

oestrogen, as well as inflammatory chemicals that can affect hormones like insulin," says Tim Crowe, Associate Professor in the School of Exercise and Nutrition Sciences at Deakin University. "As excess oestrogen has been linked

to conditions like breast cancer, it is important to maintain a healthy weight."



Hormone Help:

Lose excess kilos, and exercise and eat well to ensure you fit into your little black dress. Make sure you get enough sleep – less than six hours a night can lead to weight gain.



Smoking and Drinking

These vices have both been shown in studies to ramp up oestrogen levels, which may lead you to have an excess amount, causing imbalance of other hormones.



Hormone Help:

- **Have more alcohol-free days** and when you drink, go for spritzers, which mix half soda water with half wine.
- **Sign up for alcohol free challenges** such as Dry July or Ocsober.
- **Contact Quitline** counsellor (call 137 848)
- **Try nicotine replacement:** This comes in different forms such as patches, chewing gum, lozenges and nasal sprays and it helps reduce cravings.
- **See your GP:** Ask about prescription meds to lessen withdrawal, such as antidepressant drugs and medications that bind to nicotine receptors in the brain.
- **Work up a sweat:** Hitting the gym or pounding the pavement can help reduce withdrawal symptoms from nicotine and alcohol.



Plastics

Though it's convenient to use plastic for drinks and storing food, it may not be good news for your body. Increasing evidence suggests that plastics leach chemicals and synthetic hormones into food. These endocrine disrupters mimic hormones like oestrogen. Some experts believe we then take in this excess oestrogen via the food warmed or stored in plastic and it may contribute to hormonal imbalances and disease, such as breast cancer.



Hormone Help:

- **Buy a BPA-free drink bottle:** If you do end up having to buy water in a plastic bottle, don't leave it in the car – as it heats up it may leach more oestrogens into your water.
- **Use glass containers:** Store food in glass, particularly if it contains acidic ingredients, such as tomato or foods high in fats, such as salmon or cream. When heated, plastic may release more oestrogens, even if the container says it is 'microwave proof'.
- **Avoid plastic wraps:** Place sandwiches in brown paper bags.



Rushing and Stressing

Always stressed or racing the clock? Then you are constantly triggering your fight or flight response. Enter hormone hassles. As your body links progesterone to fertility, it will decide this is not a good time to conceive and, in response, will radically drop your progesterone production. Your hormone mix may then shift to excess oestrogen and cortisol (a stress hormone) plus low progesterone. Then you may feel your jeans getting tighter or your shoes feeling too snug from fluid retention. "This is because oestrogen and cortisol, along with stress, all signal fat storage, while at the same time

you've lost the counterbalancing hormone, progesterone," Weaver explains.

According to Weaver, progesterone is a natural but powerful antianxiety agent, antidepressant and diuretic, and it's essential if you want to access fat reserves to burn for energy. "Without the right amounts of progesterone you will always burn your sugar, which may lead your body to break down muscle for energy rather than accessing and burning fat stores." You may also have a tendency to suffer foggy brain and feel utterly exhausted or overly anxious about things you can't even name," Weaver says.



DIY

BALANCING ACT

PRO

Different life stages can make hormones less level than a Luna Park rollercoaster. If they're erratic, here's how to tame them:

• **Wake calmly:** "Start the day with 20 long, slow breaths taken before you get out of bed or while you wait for the kettle to boil or sit at the traffic lights," says Weaver.

• **Eat more healthy fats:** This will help the function of all your cells. Good choices include avocado, nuts, tahini, and oily fish. "These should help to diminish your desire for sweet food mid-afternoon," Weaver says.

• **Meditate:** Try meditating on the breath or looking at something beautiful, such as a flower or candle. Or close your eyes and meditate to music. "The stillness that comes from regular meditation is in itself a journey and a reward," Weaver says. "If your mind is super busy, find a CD you like that can guide you. It can help to have someone talking or asking you to imagine things for a period of time when the meditation first starts."

• **Do some calming exercise:** This may include yoga, Pilates, tai chi and qigong. They will help change your busy brainwaves to produce more alpha waves (which promote calm and heightened awareness) and theta waves (which enhance wellbeing).

• **Be grateful:** "When you are grateful you cannot be stressed, so say out loud or write down each day at least three things for which you are grateful," suggests Weaver. "Insight often comes this way and we get clarity about something that perhaps we felt confused about."

• **Hormone-Based Treatments:** To establish a more stable hormonal pattern, some women take the contraceptive pill. If they feel they are low in oestrogen, vaginal oestrogen may be used and absorbed into the body as a cream, vaginal pessary or ring that slowly releases hormones. Oestrogen patches can provide the ongoing cover of oestradiol (a form of oestrogen hormone) or a combination of oestradiol patches plus progesterone can be used. For women sensitive to hormones, side effects can sometimes be reduced by using a Mirena IUD, bypassing the bloodstream, enabling hormones like progesterone to be absorbed by your body. For women undergoing menopause, HT (hormone therapy) can help relieve symptoms such as hot flushes and is available in tablet form, nasal sprays or patches, placed under the skin to deliver the hormones.

• Complementary therapies

Plant-based oestrogens: Some health practitioners believe that foods such as soy milk, tofu, legumes and linseed provide a weaker plant version of the hormone oestrogen, boosting its levels. However, some studies suggest that tucking in to foods like soy could increase risk of oestrogen sensitive breast cancer. Bear this in mind if you have a family history or other breast cancer risk factors, such as a high alcohol intake or weight gain.

Herbal remedies: Herbs such as chasteberry, dong quai, licorice, red clover, wild yam and sage have long been used to treat women's hormonal problems. However, they should never be taken without expert supervision as they can cause side effects in some people. For example, the Therapeutic Goods Administration notes that black cohosh can sometimes lead to

liver problems. Consult a GP as well as a naturopath before taking them.

Bioidentical hormones: This term usually refers to personalised hormones made up by a compounding pharmacist to suit your individual needs as indicated by a blood or saliva test. They are a commercially made version of plant hormones that are identical to certain hormones found in our bodies. They have not been well studied, so many medical doctors oppose their use.

Soothing teas: Instead of coffee and tea, aim to drink herbal teas such as chamomile, echinacea, valerian and sarsaparilla, as these herbs have a calming action on the nervous system.

Aromatherapy: Use ylang ylang, lavender, rosemary or peppermint oil – massage a little into your forehead or place a few drops on your pillow at night before going to bed.

“MANY LIFESTYLE TRIGGERS, INCLUDING STRESS, TOO LITTLE FOOD OR INSUFFICIENT SLEEP CAN EASILY UPSET THE DELICATE BALANCE OF FEMALE HORMONES.”



HARNESS YOUR NATURAL SEX DRIVE

Sure, candles and strawberries go some way towards setting the mood, but the following hormone patterns can also be worked to your romantic advantage.

WEEK 1 DAYS 1–5

Menstruation: As you menstruate, oestrogen climbs, so your clitoris and nipples may become more sensitive. Some women love this feeling during sex, others find that they prefer to be touched less at this time of the month.

WEEK 2 DAYS 6–13

Pre-ovulation: Your sex drive may enjoy a little spike along with your fertility hormones.

WEEK 3 DAYS 14–21

Ovulation Peak: Your senses of smell, sight and touch may be in overdrive. You may also be more naturally lubricated and aroused, so sex is even more pleasurable. It's nature's way of boosting your libido at this time of peak fertility.

WEEK 4 DAYS 22–28

Premenstrual Dip: Your libido may go on holiday and you may feel less naturally aroused, particularly just before menstruation.

SEX HORMONES CAN BE DELICIOUS SUBSTANCES THAT GIVE YOU ENERGY AND VITALITY AND YET **THEY CAN ALSO WREAK HAVOC ON YOUR LIFE.**

TEST CASE



It's not the kind of thing you think of when you're bloated and grumpy, but mainstream pathology centres can test for key hormones by assessing saliva or urine. The two salivary assays – available to both women and men – are Baseline Hormone Profile and the more specific Full Cycle Female Hormone Profile, which monitors changes in hormone status over part or all of the menstrual cycle and can explain physical and emotional health symptoms such as weight gain, mood swings, night sweats and disturbed sleep by way of conditions such as dysmenorrhoea, infertility, miscarriage, PCOS, endometriosis, PMS and oestrogen dominance. Both tests measure oestrone, oestradiol, oestriol, progesterone, testosterone and DHEA. For more information, visit functionalpathology.com.au

Polycystic Ovarian Syndrome (PCOS)

According to the Royal Australian College of General Practitioners, polycystic ovarian syndrome (PCOS) affects 12 to 21 per cent of women of reproductive age, yet up to 70 per cent of sufferers remain undiagnosed. PCOS is kickstarted by an imbalance in two important female hormones; follicle-stimulating hormone (FSH) and luteinising hormone (LH). This chemical imbalance leads to an increase in insulin and testosterone, which is regarded as a male hormone. As a result, women may incur acne and excess hair growth. They may also suffer weight issues and be at higher risk of developing type 2 diabetes. A simple blood test can detect this complex hormonal hijack. ■

Body *attack*

They're supposed to protect us from foreign invaders, but modern-day immune systems are becoming increasingly paranoid, heralding a host of conditions caused by their hypervigilance. We investigate what's spooking our systems.

Words: Stephanie Osfield



If you're a PC person, you'll be all too used to notifications that your firewall's thwarted an attack. While you want to be saved from a greasy-haired hacker in an

Amsterdam loft, you don't want to be told your bestie's wedding website's high risk. Same goes for your immune system, which is like your body's firewall. Switched on 24/7, it looks out for anything that could threaten your health. (When you've picked up a cold virus, been exposed to chickenpox or cut your finger and a bacterial infection is taking hold, your immune defence jumps to attention.) Having your own watchdog sounds like the ultimate win-win, but the flip side is that its hypervigilance can work against health. In the case of autoimmune conditions, the immune system mistakes healthy cells for foreign invaders and attacks them (violent, right?). The subsequent inflammation and damage causes autoimmune disease, which can fluctuate between disease flares (the lingo used by sufferers for the unpredictable breakouts of symptoms) and periods of remission (where there are no symptoms or very few). The really worrying part is that autoimmune conditions are becoming entirely normal; coeliac, psoriasis and Chron's disease are no longer associated with disease as much as with picky dining habits.

Immunity gone wrong

According to the Mayo Clinic, 80 per cent of people affected by autoimmune diseases are women, though the reason why is not clear. There are over 80 different autoimmune diseases and though they get little publicity, they affect many people in the public eye. They include conditions like psoriasis (which affects Kim Kardashian and LeAnn

Rimes), thyroid issues (Kim Cattrall, Oprah), multiple sclerosis (Jack Osbourne, Chrissy Amphlett), coeliac disease (Zoey Deschanel) and lupus (Lady Gaga, Selena Gomez and Seal). According to the Australasian Society of Clinical Immunology and Allergy (ASCIA), autoimmune diseases affect around one in 20 people and are among the most important health issues in Australia and New Zealand. "Common autoimmune diseases such as thyroiditis, rheumatoid arthritis and diabetes affect more than one in 100 people," says Professor Richard Loh, immunologist and spokesperson for ASCIA. "Autoimmune disease is either localised (affecting one organ) or systemic (impacting on multiple areas of the body, organs and tissues at the same time)," Loh explains. "Autoimmune conditions are usually diagnosed and monitored by medical specialists using a combination of clinical history, blood tests and other investigations, such as x-rays. Sometimes a biopsy of affected tissues may be required for diagnosis."

Traditional treatment options

AD can't be cured, so treatments aim at reducing symptoms, slowing disease progress and minimising damage to organs and tissues. "Treatment usually occurs under the supervision of medical specialists, such as endocrinologists, gastroenterologists, neurologists and rheumatologists," says Loh. Options usually involve drug treatments to suppress the immune system, deal with inflammation, bind to problematic proteins/cells or replace certain antibodies that the immune system is lacking. Other treatments are currently being trialled all over

the world to help cells better regulate their immune response and even convert attacking cells to protective cells. Meanwhile, some researchers are turning their attention to simple lifestyle factors, which may be protective.

DIY stealth

At only 21, Sarah Wilson, TV presenter, editor, writer, author of *I Quit Sugar* (Random House \$25) and blogger (iquitsugar.com), developed the autoimmune condition Grave's disease, caused by an overactive thyroid. Her hair fell out and she rapidly lost 15 kilos. She dealt with the problem via diet changes and rest, but at 27 it returned in her eye and required more rest and self-care to recover. Then five years ago, Wilson developed Hashimoto's disease, caused by an underactive thyroid. At that point she became so unwell she was unable to walk or work many hours at a time and began a long journey of self-help, trying to help restore her health. Though her grandmother had both Graves and Hashimoto's disease, Wilson was keen to understand what triggered these episodes of her autoimmune disease, which led her to trial many different lifestyle changes to help control her symptoms.

Wilson found that quitting sugar made a huge difference. "The research I did confirmed for me that blood sugar imbalances inflame the digestive tract, causing leaky gut (literally, a perforated gut lining). In turn, leaky gut triggers the development of autoimmune disease. It allows toxins to pass through the perforations into the

“
The more stressed and burned out you are, THE MORE ‘AT RISK’ THE IMMUNE SYSTEM BECOMES of switching into chaotic self-attack.
”

bloodstream, triggering an autoimmune reaction as our antibodies head out to attack the foreign invaders."

As well as slashing her sugar intake, Wilson reduced alcohol, cut out coffee and cut back on foods that she felt were too acidic in her system such as wheat, dairy, potatoes, tomatoes and tofu. She started eating more green vegies and superfoods like coconut (e.g. coconut flour and oil). She made seven to eight hours of sleep a priority and tried to have times during the day to be still. "I believe that autoimmune sufferers are the proverbial canaries down the mineshaft," Wilson says. "Our symptoms are signals of what our lifestyles are doing to all of us, a reflection of the over-toxic, hyper-adrenal, sugary, sleep-deprived, anxious lives we're living."

Throughout the world, autoimmune disease is on the rise. Some theories propose it's because we are too clean and our immune systems have less to do. Other theories suggest that the combo of our modern diet, unhealthy belly bacteria and stressed modern lives may be more to blame. Certainly, there is growing evidence that the following lifestyle changes may help substantially reduce risk of AD and reduce severity of symptoms:

TACKLE INFLAMMATION

People with autoimmune disease have much higher levels of internal inflammation. Reducing your intake of sugar, salt and unhealthy fats (e.g. trans fats) can help reduce inflammation. Also minimise cooking techniques like caramelisation or BBQing – the browning produces Advanced glycation end products (AGEs), which, when eaten, can increase the release of inflammatory chemicals in your body. And of course, quit smoking, which causes premature ageing from the inside out.

CHILLAX

When you're stressed, your body goes into 'fight or flight' mode, releasing adrenal hormones. In ye olde days, we used to run or stand and fight, which burned those chemicals off, but in the sedentary era, they stay circulating in our systems, eroding our health. So when you're racing the clock at work or you've just swerved to avoid a car accident, those stress chemicals are elevated and remain elevated, which can be damaging in the body. "Our immune system is dependent on adrenal hormones for balance," says Angela Hywood, a naturopath specialising in restorative endocrinology and women's health at her Sydney clinic Tonic. "So adrenal health is linked to your immune health in a big way. The more stressed and burned out you are, the more 'at risk' the immune system becomes of switching into chaotic self-attack, which is the simplest way to describe autoimmune disease." In hindsight, Wilson believes that

stress and pushing herself too hard were both pivotal factors in triggering her autoimmune disease. "When I got Hashimoto's, I was burned out, drinking too much coffee, knocking back half a bottle of wine each night, working 15-hour days, not sleeping, striving and climbing higher because I didn't think I was enough on my own," she confesses. Years later, when Wilson started meditating, she realised instant and ongoing benefits. "Since meditating twice a day for 20 minutes, my hormone levels (previously depleted to zip) have returned to normal."

Meditation not your thing? Find some other way to unwind every day – visualisation or periods of stillness, where you relax and listen to soothing music or soundscapes. Watch the sunset, read a few pages of a great book or do tai chi in your backyard. Taking time to be still and calm helps to rebalance your body and restore it to a healthier, less inflamed state, which may protect against autoimmune disease.



EXERCISE SMARTER

You don't have to train like an Olympian to reduce your inflammation. Research from the University College of London shows that moderate exercise of just 2.5 hours a week (about 20 minutes a day) lowers inflammation in the body. Don't overtax your body by running marathons or doing back-to-back gym classes, as this can be counter-productive. "In managing my condition it helped for me to exercise less or, at least less forcibly," says Wilson. "Over exercising causes a lot of 'rusting' (inflammation) of our bodies. We don't get told this. More exertion equals more oxygen, which equals more 'rust' in your body. I used to run a lot; now I walk and do yoga and swim."

80%

OF PEOPLE
AFFECTED BY
AUTOIMMUNE
DISEASE ARE
WOMEN, ALTHOUGH
THE REASON
IS UNCLEAR.

CUT THE CHARDY

"Alcohol is a pure carbohydrate, so it is basically sugar, in one of its nastiest forms," says Hywood. "Sugar is utterly exhausting to the adrenal gland (two tiny glands located on the top of your kidneys). It sends the adrenals on a rollercoaster to crash and burn." As well as putting chemicals in your body that overtax your liver, kidneys and lymphatic system, Hywood warns that alcohol damages the delicate flora of your digestive system. That's incentive to cut the number of days you drink and limit drinks on those days to two glasses, max. Choose wine with a lower alcohol content, or if you have spirits, only have one glass.





FIX YOUR GUT

Our changing Western diet is a big contributor to autoimmune disease, believes Charles Mackay, an immunology expert and NSW Chair of Diabetes at the Charles Perkins Centre, University of Sydney. "Less fibre, more processed food and the weight gain that can result from this has altered the mix of microbes in the gut," Mackay explains. "This can affect our immune system and may be driving the rise in allergy, asthma and autoimmune disease in industrialised countries."

There is growing acceptance that 'leaky gut' syndrome may be involved. This occurs over time when the lining of the small intestine becomes damaged and allows particles from foods like proteins to pass into the bloodstream, triggering unhealthy immune responses. "There is some evidence that a leaky gut may be linked to conditions like Type 1 diabetes," Mackay says. "It could be that some unhelpful bacteria or products of bacteria pass through the gut lining and stimulate the immune system in a way that causes it to attack the wrong target," he says. "For someone to develop an autoimmune disease like type 1 diabetes, you generally have to have a genetic predisposition as well as an environmental trigger."

"It may be that a leaky gut is the environmental trigger. I think there's some scientific basis for a possible effect of grains on the gut lining for some people, but I don't think that this means all of us – there are plenty of healthy people who eat grains."

To boost your gut health, eat a cleaner diet, high in fresh fruit and vegetables and lean protein. If you tend towards allergy, sensitive skin or suffer irritable bowel, it may be worth trialling a period of eating less grains or less gluten. Consuming more fermented foods and daily probiotics may also greatly help to restore a better belly bacteria balance, which in turn boosts immunity and reduces inflammation.



PHOTOGRAPHY: THINKSTOCK

Faces of autoimmune disease

Catching autoimmune disease early can help reduce the level of damage and inflammation, so make sure you see your GP if you notice any of the following signs of these more common autoimmune conditions:

PSORIASIS: The immune system treats normal skin cells as pathogens and tries to grow new ones, causing overgrowth of skin cells. These rapidly build up to form inflamed skin patches.

Signs: Red, irritated skin that may also develop thick, flaky or silvery-white patches. It may be both painful, tender and itchy. Over time, joints may also feel sore or hot due to internal inflammation.

RHEUMATOID ARTHRITIS: The body attacks the tissues lining the joints and inflames the synovium, which contains a thick fluid, which looks a little like egg white and lubricates the area between joints.

Signs: Inflammation occurs around joints, causing pain, heat and swelling, sometimes accompanied by weight loss, fever, lethargy and hard, round nodules under the skin.

MULTIPLE SCLEROSIS: The myelin sheath, which protects nerve fibres in the brain and spinal cord, is attacked and damaged by the immune system. Messages to and from the brain are then interrupted, just like electrical energy is interrupted during a blackout.

Signs: Blurred or double vision, slurring of words or speech difficulty, fatigue, weakness in arms or legs, loss of mobility, co-ordination, muscle spasms, trouble with memory and concentration,

DIABETES TYPE 1: The immune system attacks and damages the islet cells that make insulin in the pancreas. With too little insulin to reduce blood glucose levels, the body has elevated blood sugars, which

can damage eyes, kidneys, nerves and other organs.

Signs: Excessive thirst, frequent urination, hunger, blurry eyesight, tiredness, slow healing of sores, dry, itchy skin, numbness or tingling in feet.

COELIAC DISEASE: In response to gluten, the immune system damages the lining of the small intestine and absorption of nutrients is reduced.

Signs: Tummy bloating and pain, diarrhoea or constipation, weight loss or gain, fatigue, chronic skin rash, missed periods or infertility.

INFLAMMATORY BOWEL DISEASE: This includes conditions like Crohn's disease and ulcerative colitis, which occur when the immune system attacks and damages the layers and lining of the bowel, causing chronic inflammation.

Signs: Abdominal pain, diarrhoea (sometimes with blood or pus), rectal bleeding, fever, weight loss and exhaustion, mouth ulcers, painful or difficult bowel motions.

THYROID DISEASE: The immune system attacks the thyroid gland, causing Grave's disease, where the body makes too much thyroid hormone, or Hashimoto's disease, where the body doesn't make enough.

Signs: Graves disease: Weight loss, sweating, bulging eyes, shaking, irritability, muscle weakness.

Hashimotos: Weight gain, fluid retention, sensitivity to cold, facial swelling, constipation, weakness, fatigue, muscle aches and stiff joints. ■



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TACKLE: *Acne & Wrinkles*

MEDIK8 TITANIUM DERMASTAMP

What is it? A targeted, precise and pain-free form of skin needling. The Titanium Dermastamp is an easy-to-use tool comprising 38 titanium needles on its head. As you roll it over your skin, ultra-fine micro-needles penetrate the epidermis, puncturing the skin's surface. This allows for maximum penetration of any cream or serum, including those made by Medik8, increasing their efficiency.

The cost: \$79.60, medik8.com.au

CLARISONIC ARIA

What is it? The facial brush works much like the original, removing impurities, reducing the appearance of pores and increasing product absorption of creams, serums and moisturisers. This new and improved design features three speed settings, so you can customise to address your specific skin concerns, a timer, drying stand and USB-enabled charger that's great for when you're on the road.

The cost: \$245, clarisonic.com.au

TANDA ZAP POWER

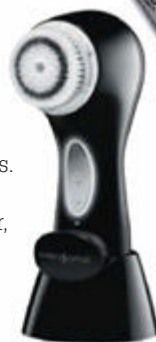
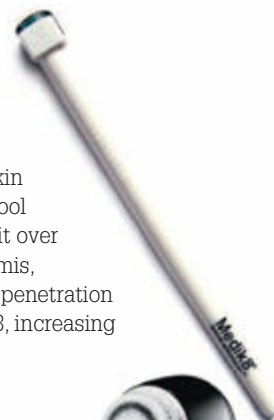
What is it? A handheld light device designed to deal with acne breakouts. This small, rechargeable tool uses blue LED, sonic vibration and gentle warming to clear blemishes without drying out your skin. A great alternative to harsh creams such as benzoyl peroxide, which can be messy and irritating.

The cost: \$120.70 (plus the cost of a US adaptor), available via senseonline.com.au

LANCÔME RENERGIE MULTI-LIFT NIGHT CREAM

What is it? The retightening cream and massage disk duo promises to tighten your face if used nightly for four weeks. The silky overnight balm is enriched with resveratrol and rye seed extract, while the massage disk makes for easy application onto your cheekbones, forehead, jawline and neck, pushing up the facial features as the cream is applied.

The cost: \$150, 1300 651 991/facebook.com/LancomeAus



TACKLE: *Nails, Lashes & More*

CYNTHIA ROWLAND LUSCIOUS LIPS

What is it? While thinning lips are a telltale sign of ageing, this innovative lip plumper works to create a fuller pout. A safe, affordable and painless alternative to collagen injections, it uses a gentle vacuum to coax fluid into the lips, subtly enlarging them for a truly natural look. As your lips

are smoothed, the fine lines and wrinkles surrounding them also become less apparent.

The cost: \$99.90, cynthiarowland.com

MINETAN HANDY TAN

What is it? This handheld at-home spray-tanning machine is compact and lighter than most hairdryers – a first for the tanning industry! The all-in-one spray gun is easy to use on yourself or

friends. It creates a super fine mist and touch-dry finish so there's no sticky residue and stains. The adjustable nozzle allows even application on every part of your body. There's even a built-in heat switch to keep you warm when tanning in the winter!

The cost: \$199, minespraytan.com

1000HOUR HEATED EYELASH CURLER

What is it? Want to enhance your lashes without smudgy, flake-prone mascara? The secret to fluttery eyelashes is this nifty tool, which is small enough to keep in your purse and only takes 15 seconds to heat up. There's no need to be afraid – this battery-powered gadget is totally safe and easy. You get close to the root without pinching your lids and the heat really locks the curl in. Great for touch-ups over



dry mascara throughout the day!

The cost: \$18.95, 1000hour.com.au

MICRO NAIL

What is it? The new way of buff, smooth and polish your nails without having to go into the salon. The process is painless and leaves your fingertips beautifully shiny, improving the appearance of dryness in a matter of seconds. Apply the battery-powered, mineral-packed roller to your nail to smooth ridges and leave them with a glossy shine. Go naked or use it to prime your nails for polish. The effect lasts for up to two weeks.

The cost: \$60, micronail.com.au



TACKLE: *Hair Removal, Cellulite & Tightening*

PHILIPS LUMEA COMFORT IPL

What is it? The compact hair-removal device applies gentle pulses of light to the root, causing the hair to shed naturally and future regrowth to slow. You get silky smooth skin without stepping foot in the salon and it's safe to use on curvy areas of your face and body, including your arms, belly, bikini, armpits, chin and upper lip. With bi-weekly treatments, you can get smooth hair-free skin in as little as a month.

The cost: \$399, available exclusively at Shaver Shop, shavershop.com.au

BLISS FATGIRLSLIM LEAN MACHINE

What is it? A spa-inspired body contouring device that combines a vacuum massage device with firming cream to reduce the appearance of cellulite, and smooth dimpled skin. Simply apply a thin layer of cream on the area before treating it with the massage device. Bliss recommends



using on the legs, buttocks and abs.

The cost: \$145, blissworld.com

RIIVIVA MICRODERM

What is it? This at-home device is designed to eliminate stretch marks and increase firmness. The tool uses diamond-tip technology to exfoliate the superficial layer of skin, making it appear more even through microdermabrasion. All it takes is one session to see results. The device exfoliates more deeply than scrubs, while the suction function stimulates the dermis and remodels the skin in the process.

The cost: US\$269, riiviva.com

SKIN PHYSICS LIPOSCULPT ULTRASONIC BODY SCULPTING SYSTEM

What is it? A high-tech alternative to dry brushing, this device claims to strengthen and stimulate ageing skin by using ultrasound and infrared technology. The low-frequency energy targets fat cells without harming the surrounding tissue. Though it won't slim the body, it will reduce the appearance of cellulite and dimpled 'orange peel' skin.

The cost: \$349, skinphysics.com.au

FAKE IT

'til you make it

A faux glow is the way to go, but which self-tan method is best for you?



Fact: only 2.84 per cent of people (very approximately) parading tans this time of year are actually sun kissed. So how do some people manage to pull off a seamless, orange-free glow while others look as though they've bathed in Fanta (while wearing a balaclava)? There's more to DIY tanning than cool fonts and pop-coloured tubes suggest. We hit the science, including what makes self tanners work and which one's right for your skin (and motor skills).

Are there any harmful ingredients in my tanning product?

The most popular active ingredient, dihydroxyacetone (DHA), is a potential irritant. Approximately one in 10 people have skin that can't tolerate DHA, which is why a skin patch test is imperative. The day before you self-tan for the first time, test a dollar-size amount on the inside of your arm or inner thigh to see whether you react.

DHA is a sugar that reacts with amino acids in dead skin cells, resulting in a darkening effect. The ingredient is only approved for external use, which does not include lips or areas around the eyes and eyebrows. Spray tans using DHA can also irritate lungs. Dermatologist Dr Michael Freeman (skincentre.com.au) says that risks are minimal for people who aren't allergic to DHA. "The newer, open spray cabinets minimise the exposure to the lungs," he says. As an extra precaution, wear nose plugs or hold your breath so you don't inhale any product. Alternatively, opt for at-home tanning lotions. "This eliminates the risk of lung exposure," says Dr Freeman.

What other ingredients should I look for?

A laundry list of additives doesn't necessarily mean a tan will work better. In fact, as a

general rule, fewer ingredients is better; the more ingredients a product has, the greater the probability that you will have an adverse or allergic reaction to it. Dr Freeman singles out ingredients such as levulinic acid and psoralens, which are both photosensitisers and can cause abnormal skin reactions. "These agents could well cause problems in the future."

How long does a DHA tan last?

A colour change is usually apparent within an hour of applying the product while colour will gradually darken over

the next eight to 24 hours. A DHA tan will usually last five to seven days, until the dead skin cells rub off. You can maintain the results by repeating the application every four days.

Are there alternatives?

There have been reports of people buying tanning pills and tanning injections online, but it's neither legal nor safe. The pill, for example, contains the colour additive canthaxanthin, which in large amounts can permanently discolour skin and cause hives, liver damage and impaired vision. As pills often contain beta-carotene (in

carrots), users often sport an orange tint. Tanning injections containing the drug melanotan can be purchased online from the black market, but go completely unregulated and unapproved by the Therapeutic Goods Association (TGA). Side effects are largely unknown, but the pigment-producing hormone melanotan has been linked to nausea, high blood pressure and panic attacks. "There are also reports of these producing melanoma," says Dr Freeman.

A third alternative is over-the-counter tan 'accelerators' or 'promoters', which claim to

accelerate natural tanning by stimulating melanin production, but efficacy is questionable. Instead, Dr Freeman recommends "immediate bronzers", which contain natural ingredients such as walnut shell extract, carrot oil and henna.

Do any tanners protect against UV radiation?

Short answer, no. A fake tan is like dying your skin – the change is only on the outside and UV radiation can still penetrate your dermal layers to damage cells and increase the risk of melanoma. Sunscreen is critical in addition to fake tan.

The perfect tan, EVERY TIME

Want a no-mess, no-fuss faux glow every time? Achieve a streak-free, salon-worthy tan at home with these nifty expert tips.

GO BARE After your shower, you may instinctively reach for your deodorant or moisturiser, but stop yourself. Combining your self-tanner with deodorant can make your skin turn a strange green-grey colour, while moisturiser (or any other oil-based product) will interfere with skin's ability to absorb the tanning product.

CURB THE CLEAN-UP

Want to avoid fake tan on your clothing and bed sheets? Stick panty liners onto the inside of your shirt to protect it from stains around the armpits. Line your dresses with a bit of fashion tape so the tan doesn't transfer. And if you tan before bed, slip into some self-tanning pyjamas to ensure it doesn't rub off on your bedspread.

GET THE TIMING RIGHT

Get fuzz free at least 24 hours in advance. When you tear the hair out of the follicle via waxing, threading or tweezing, you leave the follicle open. Your self-tanner can get trapped in these pools, creating tiny dark spots. Also, rubbing DHA on sensitive skin increases the risk of irritation.

ALWAYS PREP AND DRY THE SKIN

A day before you plan to tan, do a test patch to avoid any nasty surprises. If you're good to go, prepare your skin by dry brushing or exfoliating with an oil-free product before letting it dry completely. "Any excess moisture will inhibit the active tanning ingredients processing efficiently," says Blake James, director and co-founder of Bondi Sands. "To avoid this, allow your skin to dry for one hour after showering."

PUT YOUR BEST FACE FORWARD

If anything, tanning your face requires even more precision than tanning your body. After cleansing and exfoliating (but not moisturising), pull your hair into a ponytail to ensure you don't miss any parts. Apply under-eye cream. Having the skin under your eyes remain slightly lighter gives your facial tan a more natural, younger look. "Gradual tanning lotions are perfect for the face," says James. "Apply daily and build the colour over a number of days for greater control." To avoid a disaster, only go one shade darker than your natural face colour and don't forget to rub into your neck, earlobes and upper ears as well as your face.

AVOID BUILD-UP

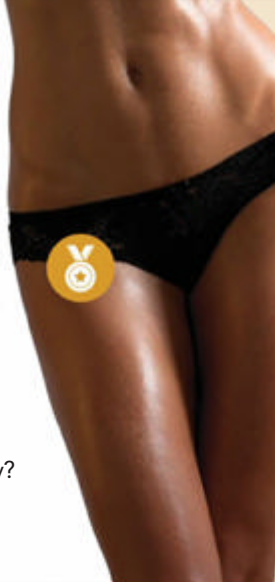
Avoid tan build-up in tricky areas by coating your knees, heels and elbows with moisturiser, which will act as a barrier. Start at the bottom and work your way up, spreading the tanning product using an applicator mitt on your legs, then torso, then arms, then face to prevent creating bend-over marks (you know what we're talking about). James recommends tanning foam. "The foam spreads easily, dries quickly and has an added bronzer so it's easy to see any spots you may have missed," he says. Sit in front of a cool fan or use a hairdryer on a cool setting to speed up the dry time.

DON'T SKIMP ON PRODUCT

Don't be afraid you'll overdo it. The end shade depends on whether you choose a light, medium or dark formula – not how much product you use. If you skimp, you're likely to miss a spot.

The Tanning AWARDS

Blinded by your own limbs and tossing up between a gradual lotion and micro-mist spray? We tested a few of the most popular tanning products. Here's who came out on top...



BEST ALL-ROUNDER

WINNER: Bondi Sands Self Tanning Foam Dark (1), \$19.95, bondisands.com.au "This foam is super easy to use with a mitt. The colour is dark, but not orange. I put it on just before I go out and wash it off the next day. I'd say it's comparable to St. Tropez, which is almost double the price."

RUNNER UP: Salon Tan Spray Tan (2), \$19.95, salontan.com.au "The mist sprayed evenly, developed into a really natural colour and faded evenly. The formula has a fresh fragrance, unlike most self-tanners, and works to hydrate the skin."

FAST TAN

WINNER: St. Tropez Self Tan Express (3), \$60, sttropeztan.com.au "The Rolls-Royce of tanners! Gives great colour, is long lasting and doesn't smell! You're in control – wait an hour for a super light tan, two for a slightly darker one and three for the darkest."

RUNNER UP: Michael Kors Liquid Tan Self Tanner (4), \$55, 1800 061 326 "The colour is light and shimmery and it smells lovely. (I didn't shower until the next night and wasn't grossed out). I used my hands, not a mitt, and found it was super easy to apply."

FACE TAN

WINNER: Jbronze Face Flawless Tan (5), \$24.95, jbronze.com.au "This gives a natural bronze glow – no orange in sight. The formula's enriched with shea butter, coconut oil and argan oil so it doesn't dry your skin out either."

RUNNER UP: CLINIQUE Self Sun Face Bronzing Gel Tint (6), \$36, clinique.com.au "So many face products I try result in serious breakouts but not this one. The oil-free cream doesn't clog pores and gives a natural bronzed look that washes off with soap and water."

INSTANT TAN

WINNER: Dr. LeWinn's Instant Body Bronzer – Wash-Off Bronzing Gel (7), \$19.95, drlewinns.com.au "This quick-dry, wash-off formula doesn't streak, stain or have that orange look. Plus, the gel has tiny flecks of shimmer that make your skin really seem to shine."

RUNNER UP: Garnier Ambre Solaire No-Streaks Wash Off Instant Bronzer Gel (8), \$9.95, 1300 659 259 "This didn't cover any skin imperfections like most tans do. My legs seemed a bit patchy after applying and it took a while to blend out. It's not greasy or sticky, but it doesn't look as natural as other wash-off tans because of the orangey hue and large specks of glitter within the gel."

GRADUAL TAN

WINNER: Sunescape Gradual Tanner (9), \$33, sunescape.com.au "A self-tanner, tan extender and moisturiser in one? Yes, please! All of the Sunescape products I've tried have not disappointed – and this is no exception. Great colour, even coverage and not much of a smell."

RUNNER UP: LDN:SKINS Gradual Tan Lotion (10), \$22.00, ldnskins.com "The colour was really lovely and was designed for fairer-skinned ladies like myself. I'd say it gives a slightly deeper golden tan than your average build-it-up style, so I only need to top up every few days." ■



Eco WONDERS



Sukin Sunless Bronzing Gel, \$17.95,

sukinorganics.com.

"It's very gradual. You need at least three coats to start looking brown (though this may just be because I'm very pale!). The colour lasts for three days, and then you'll need to top up. Gel is harder to apply so use a mitt to ensure even coverage."

TanOrganic Self-tan, \$35, tanorganic.com

"The scent is lovely and it dries super quickly. Made from natural, certified organic ingredients, the ultra-moisturising tanner is based with aloe vera and free from synthetic colours, ingredients, fragrances and parabens. Great for people with sensitive skin and expecting or breastfeeding mothers."



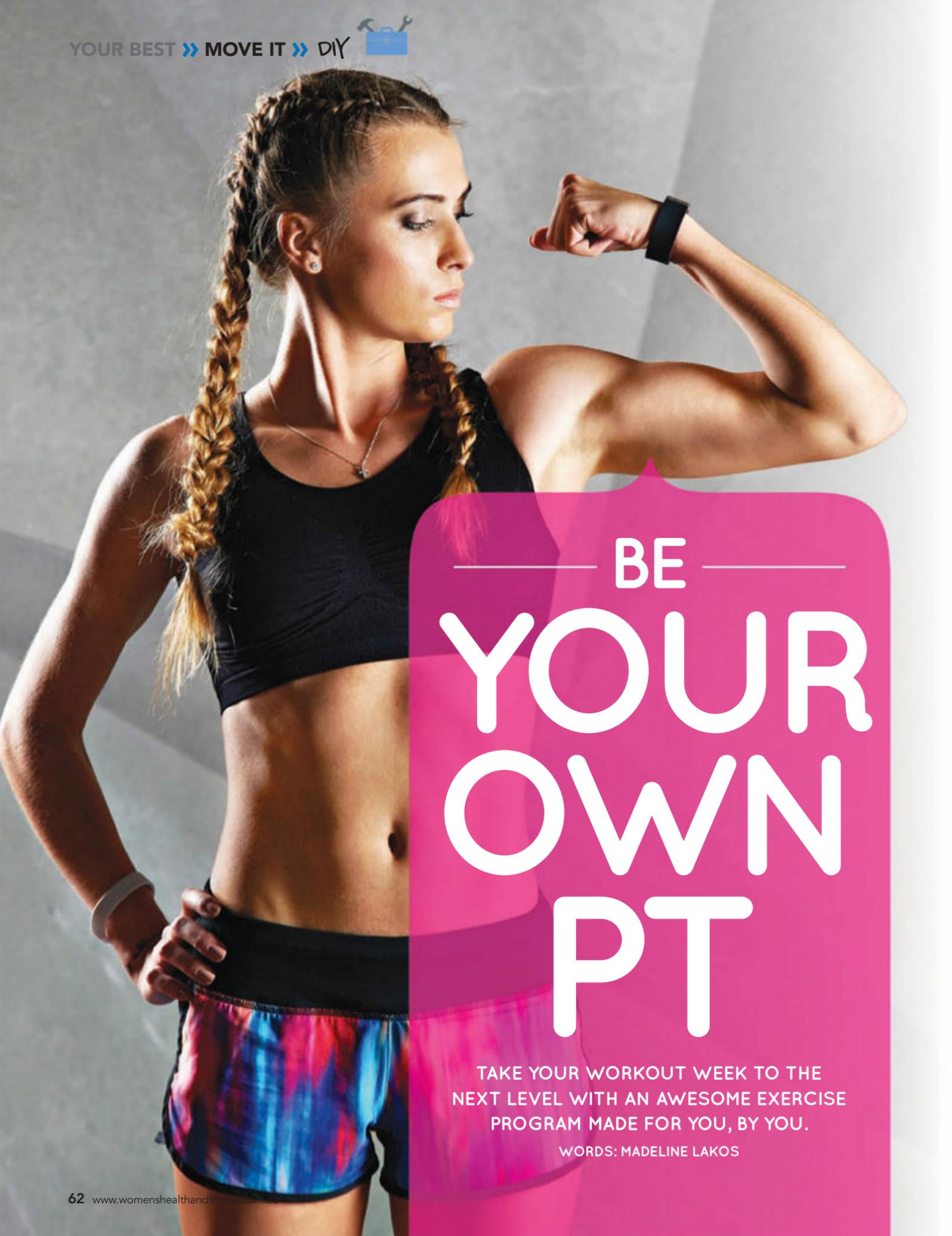
ModelCo Natural Tan Lotion, \$14.95, modelcocosmetics.com

"Another amazing product from ModelCo. Enriched with nourishing oils and free from PEGs, parabens, sulfates, synthetic colours and fragrances. The formula goes on clear, so use a mitt to ensure even application."





YOUR BEST
MOVE IT



— BE —
**YOUR
OWN
PT**

TAKE YOUR WORKOUT WEEK TO THE
NEXT LEVEL WITH AN AWESOME EXERCISE
PROGRAM MADE FOR YOU, BY YOU.

WORDS: MADELINE LAKOS

The improv training model might suit your yen for variety and general activity level targets, but ad hoc training plans aren't conducive to attaining specific goals. "Failing to plan is planning to fail," says Goodlife personal trainer (goodlifehealthclubs.com.au) and triathlete Sarah Menlove. "And you know whoever does the plan for you will keep you accountable!" We say: what if the person keeping you accountable for your goals were you? (And we don't just mean stepping on the scales when you pass them in the shopping centre or flexing your biceps in the mirror and guessing whether they're bigger). We're talking about setting measurable goals and making them happen through the power of commitment devices (otherwise known as writing it down and sticking it on your wall). "You will be more likely to stick to something when you can see it mapped out in front of you rather than just saying you want to do it," says Menlove. "And having specific exercises to target your individual goals means you have a plan of attack, so you don't get to the gym and slack off or wander around wondering what to do." While personal trainers are program pros, there is no reason you can't have a shot at making your own. However, it's vital that you make it just as personal. The Internet offers up plenty of routines promising a plethora of appealing outcomes, but the reality is that a program that works for 'them' may or may not work for you. "Two clients may have the same demographics and goals, but it doesn't make them the same person, so they shouldn't be given the same program," says Scott Hunt from Fitness Enhancement (fitnessenhancement.com). Any good fitness program starts with an assessment to determine what you want, what you need and what will work for you.

"When making a routine for a client, trainers look at everything else about the person; from injuries to past exercise experience, to their job and everything else that will help us determine the best program for them," says Hunt. It might sound more complicated than the one-size-fits-all workouts found online, but a personalised program will blow them of the water in terms of results.

Goals for gold

We know it's tempting to be superwoman and smash out all your goals at once. But setting yourself one measurable goal at a time will give you the inherent thrill and gratitude of seeing results. So how do you choose just one? "List all your goals, then decide which is the most meaningful to you at this time. Often this is the one that you feel will most positively change your life in the next three to six months or is influenced by an event in the near future, such as a wedding or a triathlon," says exercise physiologist Leah Rowan (nbexercisephysiology.com.au). "This is your most important goal and the one that your exercise plan needs to focus on."

Why have a goal at all? Because motivation is the biggest obstacle to exercise.

"We let other things in our busy lives take priority if we don't set a routine, so our health and fitness gets pushed aside," says Rowan. "Even really regular exercisers lose motivation at some point for various reasons. The key to getting back is finding the thing that really motivates us." Having a fitness goal ensures the longevity of your routine as well as giving you a reason to get your ass down to the gym. But not all goals were made equal. "Setting goals is not the be all and end all. Actually, there is plenty of evidence to suggest that if we state our goals, we tend to stress more that we haven't done them, particularly if

they're quite grand," says sports psychologist Dane Barclay (pspc.com.au) "If we know that we're not moving towards them, or at least not at the rate that we want, we can easily disengage, or become anxious and frustrated."

The SMART principle for goal setting —specific, measurable, achievable, realistic and timely — increases the probability of meeting your objectives. A SMART goal means you don't just say you'll lose weight, but you say you'll lose three kilograms in three weeks because you think that's a realistic and achievable goal in the time you want. Though measurable goals are often the most daunting ones (because

you're going to do (weights, cardio, HIIT).

• **TIME:** How much time you spend exercising per session.

Frequency:

"Aim to exercise a minimum of three to five days a week," says Rowan. "This helps you develop a routine and means you improve faster and the body is continually challenged." But for those trying to cram in exercise when they can, it's about how much you put in to your sessions. Are you willing to sacrifice your beauty sleep in favour of a workout? How about your favourite TV show, or dinner with the family? Finding time for exercise is like finding your car keys in your handbag:

“**TRAINING THREE SESSIONS A WEEK TO YOUR FULL POTENTIAL IS OFTEN BETTER THAN FIVE SESSIONS A WEEK HALF HEARTED.**”

you know skipping all those gym sessions in favour of the snooze button is going to show), they are also the most satisfying because you know what you're doing works, and when it doesn't to change what you're doing.

FITT-ing it all in

So once you've decided on your SMART goal, how do you put together a fitness program that both works towards it and challenges you? Rowan recommends using the FITT principal:

- **FREQUENCY:** Decide how many sessions you can fit in a week.
- **INTENSITY:** Choose high- or low-intensity exercise depending on your time, your needs and your recovery.
- **TYPE:** What type of exercise

it should be easy, but it never is. If your fitness plan is going to fit into your already overbooked life, you're going to need to decide how much exercise time you need to achieve your goals. "Deciding how many days a week you want to train shouldn't solely be about the results you want, it should be about the work you are prepared and able to put in to achieve those results," says Hunt. A recent study published in the *European Journal of Applied Physiology*, conducted on healthy and active individuals, concluded that 30 minutes of physical activity (walking or running) three times a week was enough to cause small favourable changes in body composition and VO2 max. Realistically, committing to three sessions a week is pretty easy. Although gym-junkie logic



would have you believe that if a little is good then more must be better. Sometimes it is, and sometimes it isn't according to Hunt: "Training three sessions a week to your full potential is often better than five sessions a week half hearted," he says. The gung-ho will know that it's easy to overcommit yourself, but the key to getting the most out of your training is mind over matter. "For some people, pushing yourself to do an extra couple of sessions means they burn out and don't achieve their goals, or they throw the towel in after achieving their goal," says Hunt. "The number-one priority should be to achieve your goal, and the number-two priority should be to achieve it ASAP."

Intensity:

There is probably no bigger goal buzz-kill than burning out, so varying the intensity of your workouts throughout the week and allowing for muscle repair is a vital part of your program's success. "In order for adaptations to occur, you should keep variety in your training and also give the muscles time to recover between sessions," says Menlove. "So if you don't have a day between your sessions, like if you were training five days a week, I would recommend alternating between cardio and weights training sessions." Knowing how recovery time varies between different workouts will give you an idea of how to space out your program. Anyone who is familiar with delayed-onset muscle soreness (DOMS) — which usually occurs 48 hours after the relevant workout — will know how tempting it is to write yourself off for the entire week until it subsides. A more efficient alternative, for resistance training at least, is to split your workouts between body parts. "Doing lower body and abs one session and upper body the next is a good split for beginners," says Hunt. "But if you've advanced past that

program you can try legs one session, your 'push' muscles (so that's largely your chest and triceps) the next session, and your 'pull' muscles (that's your back and biceps) the next." Splits are the most common way of taking the 'ouch' out of continuous resistance training workouts because, according to Hunt, the best results come from working the muscles to 100 per cent fatigue.

If resistance training, or lots of DOMS, doesn't align with your goals, you'll be pleased to know that recovery from aerobic exercise is much simpler. In fact, you can get right back on the cardio horse pretty much right away. A recent study published in *Sports Medicine* journal recommended only three hours of recovery after high-intensity endurance training. Mind you, this was in elite athletes, so a slightly more down-to-earth opinion might say that you could probably settle for a 12-to-24-hour rest time. "Steady-state cardio doesn't place too much strain on the muscles, therefore they don't need time to repair like they do with heavy weights," says Rowan. "The recovery time would depend more on how long you exercise for. If you only did 30 minutes in the morning, another 30 minutes in the evening is fine, but if you did 60 minutes in the morning, that is probably enough for the day." However, if you want to rev intensity to rival HIIT training, you'll have to plan your sessions a little more carefully: "The body requires about 48 hours to recover from HIIT training," says Rowan. That means you need to rest for at least one full day between workouts. But for the mad keen, a rest day doesn't have to mean a day out of the gym. Low-intensity exercise like yoga, Pilates or walking will still allow your body to recover while keeping you moving (and chilled out).

Type:

How you pick your exercise depends on both your goals

and your attention span. Different exercises benefit different causes; for example, cardio is a calorie burner, so a weight-loss program is likely to include more cardio. Whereas a strengthening program will, of course, include more weights. Weight loss is about what happens in the kitchen as well as in the gym, but having a planned week of calorie-burning and muscle-toning workouts will be an essential part of your success. "Include both cardio and strength or body weight resistance exercise in all days of the program, and include some aspect of high-intensity training on at least one day," says Menlove. A 2006 study in *Sports Medicine* found that fat free mass (FFM) or muscle

the extra big leg muscles used in kicks." If hitting things isn't really your style, a simple circuit will also help you take things to the next level: "A circuit will improve cardio fitness, burn fat and help develop lean muscle," says Menlove. "By interspersing cardio exercises such as burpees and box jumps with body weight exercises like push-ups, squats and lunges, it ensures a high heart rate is maintained, all body areas are worked and the sweat is flying!"

For improved cardio capabilities, Hunt says: "Aim for at least one session a week where your heart rate is consistently elevated — like a one hour run or bike ride at a steady pace — and aim for at least one where your heart rate

MIXING IT UP WITH CLASSES, SPORTS, OUTDOORS-Y STUFF ARE ALL PERFECTLY AWESOME WAYS TO PIMP YOUR PROGRAM.

was essential for maintaining optimal metabolism. That means a combination of resistance training and cardio (as well as a high-protein diet according to the study) is the best way to lose weight and prevent it from creeping back on. A more recent study published in the *Journal of Strength and Conditioning Research* showed that HIIT burnt around four calories more per minute than aerobic or resistance training. So a combination of both is what will get you the best weight-loss results. Intervals can be as simple as sprinting on a treadmill or, as Hunt recommends, kicking the bejeezus out of a boxing bag. "Kickboxing is an awesome way to drop the kilos. It gets your heart rate higher and burns more calories than just about anything else courtesy of all

is up and down, like interval or sprint training." According to a recent study by the University of Eastern Washington, HIIT yielded similar results in regards to aerobic capacity as constant endurance training but in 2.5 times less training volume. If running is your game, then these sessions can be done on the treadmill, but if it's not you can include kickboxing or a cardio circuit session. "An interval session could include 30 to 40 minutes of three-minute intervals, running at 80 per cent effort and then 60 per cent. As you get fitter, increase this to four- and then five-minute intervals," says Menlove. If you've only got three sessions a week to train, you'll to squeeze in one each of these sessions, then add either another HIIT session or long run. But if you're bored of traditional cardio,

you can add endurance-based strength session by using lighter weights and higher reps. "Thirty or 40 reps and no breaks between sets," says Hunt.

Regardless of what your goal is, when it comes to training, variety provides the building blocks for results. "I recommend clients don't just stick to just the one type of workout. While spin class or yoga might be excellent in some areas, each of those workouts can lack in other areas," says Hunt. When changing up your routine it's also important to look at what will keep you motivated according to Rowan. "Include the types of exercise you enjoy as you are more likely to stay interested and push yourself than if you were doing something you found boring." Mixing it up with classes, sports, outdoors-y stuff are all worthy ways to pimp your program.

Time:

In terms of what you do in your sessions, the obvious answer is its quality over quantity. However, an educated approximation points to the old-fashioned hour as the go-to for most workouts. "Aside from more extreme goals, or you are training for something that takes longer than an hour like a marathon or skill-based sport, a one-hour session is more than enough for people to get amazing results," says Hunt. However, there is no point spending an hour at the gym if you only do 20 minutes' work. If you're a chronic rest-taker or phone-checker, your hour allocated for sweat time could easily turn into two hours, or an hour of getting half of what you needed to do done. The solution? Time yourself. If you only have time for the 30-second breaks, grab your smart phone, bypass that new text message (ya-huh, chronic phone checker) and set yourself a timer. For those who have a tighter schedule, look at your workout plan as hours per week. "Three one-hour sessions

split into six half-hour sessions will have comparable results," says Hunt. "You may find your results are even better from six 30-minute sessions if you give every minute that little bit more effort. Of course, it's a lot harder to fit in six sessions compared to three." However, intensity also plays a part in how much time you need to dedicate to your sessions. Higher-intensity training is probably the best way to time-shortage-proof your exercise program. According to a study published in journal *Applied Physiology, Nutrition and Metabolism*, HIIT training results in the same 24-hour energy expenditure as moderate

intensity exercise, even though it takes half the time. "If you are doing HIIT training, 20 minutes max is ideal," says Rowan. "If you are doing weights or steady cardio, about 60 minutes is enough."

Revision decisions

A killer program is only a killer program if it's working, just like a SMART goal is only smart if you measure your progress. If you want faster progress (or if you're not making any at all) then it's time to revise your program. "If it's working you should be getting faster, stronger or leaner pretty much every session. That means you

should be able to do more reps, or more advanced exercises, every session," says Hunt. "If you're not consistently stepping it up, you're not getting the most out of the session." If your motivation has started to dwindle, or your goal becomes harder than you thought, then there is no shame in going right back to the start and finding something different. But for those who have stuck out their program week after week and are still seeing results, revision every four to six weeks should be adequate. "The body starts to adapt after four or so weeks, and is no longer challenged after this time," says Rowan.





PICK YOUR PROGRAM

MY GOAL IS: LOSE WEIGHT

The lowdown:

If you can train 3 sessions:

Menlove says: "Include both cardio and strength or body weight resistance exercise in all days of the program, and include some aspect of high-intensity training on at least one day."

If you can train 5 sessions:

"You would have to alternate between cardio and weights training sessions. I would still include some of the high-intensity intervals and circuit sessions along with two or three weights or strength based sessions a week," she says.

What to do:

KICKBOXING: For a calorie-burning workout, Hunt says, "Start with six two-minute rounds with low kicks and light punches with a minute or two off in between rounds and build up to six five-minute rounds with higher and harder

kicks and punches. If you're not confident with anything tricky, keep it simple and simply do 30 punches followed by five right kicks then five left kicks and repeat for the whole round."

A short set of strength training can be squeezed in between each round so you don't miss out on your muscle building: "Try squats for the first break, push-ups for the second and assisted chin-ups for the third and repeat after the fourth, fifth and sixth round," says Hunt.

Got more time?

A kickboxing routine like this will work over a three- or five-session week. "On the two additional days, you can drop the strength training and focus on some lower-impact cardio such as bike or running that keeps your heart rate and fat burning up, but lets you recover from the strength work."



HOT TIP

Timing your rounds and your breaks make a great option for the time-poor (or time waster) because you simply have to time yourself, even when you're having a rest. "For most people a break is around 30 seconds, but they should be shorter the fitter you are," says Hunt. "If you've got enough breath back to chit chat, you've stopped for too long!"

CIRCUIT TRAINING: "Start with a longer aerobic cardio to warm up, such as 10-minute bike, then 10-minute cross trainer and then 10-minute treadmill at an easy to med intensity – or just 30 minutes of one of these without rest periods – followed by a high intensity interval circuit," says Menlove.

Sarah's Killer Cardio Circuit:

Complete the following as fast as you can:

- 20 x push-ups
- 20 x burpees
- 20 x TRX rows (pull-ups)
- 20 x squat press
- 20 x box or squat jumps
- 20 x mountain climbers
- 20 x medicine ball sit-ups
- 20 x medicine ball slams

"Depending on level of fitness, this might be enough. However, if you're at a high level of fitness, include a rest after the first set then do it again – dropping the reps to 15 then taking a shorter rest and dropping the reps to 10 for a third set," she says.

Got more time?

Completing these kinds of circuits ever day (refresher: it takes 48 hours for your body to recover from HIIT training) isn't possible. So for a five-session-a-week program, you're going to have to change it up. "You would

have to alternate between cardio and weights training sessions. I would still include some of the high-intensity

intervals and circuit sessions along with two or three weights or strength-based sessions a week."



PHOTOGRAPHY: THINKSTOCK

MY GOAL IS: GET STRONGER

The lowdown:

3 sessions a week: "Work your whole body each of the three days," advises Hunt. "If you're finding you're not recovered enough in between sessions, the good news is that you're training hard enough to fatigue yourself that much so you can adapt it to a split program of lower body and abs for one session and upper body the next," he says.

5 sessions a week: "A five-sessions-per-week strength training program definitely needs a split program to ensure you recover and get stronger after each session," says Hunt.

What to do:

SCOTT HUNT'S FULL-BODY

WEIGHTS SESSION: "Try this simple strength-training routine to get a great all-over workout that works every muscle in your body with an extra emphasis on your core.

Aim for about 20 reps of each and perform all six exercises in a row with minimal breaks."

Legs: Squats » You are fresh for your first set, so aim for heavy weights and a full range of motion.

Lunge » Perform a normal lunge and on the up phase lift your rear leg to waist height, this will increase variety and intensity.

Medicine ball push-ups » Place

one hand on a medicine ball to increase the intensity and core work. After each push-up, roll the ball to the other hand. (This is a push exercise)

Seated row » Ensure you get a full range of motion and pull the bar right to your stomach. Look after your back and ensure you don't cheat by swinging the bar as you get tired. (This is a pull exercise)

Fit ball bench press » Perform a normal bench press but swap the bench for the ball to work your core and stability. (This is a push exercise)

Fit ball rows » Place your stomach on a fit ball with your toes on the ground and your upper

body out over the ball in a straight line. With a dumbbell in each hand, perform a row. Ensure you keep your body in a straight line for the whole set. This is twice as fast as doing a one-arm row and then swapping to do the other side! (This is a pull exercise)

Got more time?

Enter the push and pull split sessions! Refresher: pull muscles (back and biceps) on one day, push muscles (chest and triceps) the next, and then a legs day. That means you'll be able to work out your entire body over three days, meaning you could work each group almost twice a week!

MY GOAL IS: AEROBIC CONDITIONING

The Lowdown:

3 Sessions: "Aim for at least one session a week where your heart rate is consistently elevated – like a one-hour run or bike ride at a steady pace – and aim for at least one where your heart rate is up and down, like interval or sprint training," says Hunt.

5 Sessions: "Include another slow, long-distance run (not straight after the first one) and a paced run, which will be shorter in duration than what you are training for but at a faster speed. For example, 30 minutes holding 80 per cent," says Menlove.

What to do:

"Start with a slow, long-distance run; this is done at 60 to 70 per cent intensity so should feel easy throughout a 60- or 90-minute session," says Menlove. "If you can't run for this long, start small and add five minutes more each week to build up." Your elevated heart rate session could be either a treadmill interval session ("For example, 30 to 40 minutes of three minutes at 80 per cent, then three at 60 per cent," says Menlove) or a kickboxing or circuit session (as outlined in weight loss). For other sessions, choose the exercise that best correlates with your goals. "Whether you're after overall aerobic

“
WHETHER YOU'RE AFTER
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”

conditioning for a sport involving a lot of sprint work or are training for a marathon, you need to mix up your cardio work," says Hunt.

Got more time:

"Add in a muscular endurance session," says Hunt. "Essentially a strength training program, but with light weights and high reps and no breaks in between sets. While you will of course get strength conditioning out of this, the high reps make it much more aerobic. The goal of this session is to build that endurance in your muscles for when your lungs are doing great thanks to all the long runs, but your muscles are crying out for you to stop." ■



VIRTUAL TRAINING

With every second trainer flogging a fitness blog, there's an awful lot of junk floating round the interwebs. We've whittled cyberspace to a tight edit of credible pros.

Words: Madeline Lakos



PHOTOGRAPHY: THINKSTOCK

When looking for fitness advice and inspiration, the blogosphere could be your best friend or your worst enemy. A search for fitness blogs returns some 200 million results, most of which aren't even blogs. The sophistication and accessibility of blogging software adds a layer of difficulty to sorting the good from the bad. "Often bloggers use their own inspiring stories to motivate others, which is useful if it is not presented in a way which intimidates its readers or presents an unnaturally 'perfect' existence," says sports psychologist Alice Williams (condorperformance.com). Self-promotion and social media aren't exactly strangers

to each other, but a good blog will ideally do both: "As long as a blog contains necessary techniques, tips, suggestions and advice for others to follow, a blogger may indeed have both an intention to self-promote and also to help people." Williams says. Even if the said cohort of fitness professions could point you in the direction of accredited material online, chances are it's in a language you don't understand. (Have you ever tried speaking exercise physiologist? It's hard). We've trawled through enough fitness blogs to sink an e-ship and come up with four great (and qualified) girls keen to take the fitness blogosphere to the next level.

THE EXERCISE PHYSIOLOGIST

THE PRO: Gabrielle Maston

THE BLOG: Gabrielle Maston (gabriellemaston.com)

It's great for: In-depth analysis of all things exercise and diet related (with links to all relevant research if you're a chronic fact checker).

On fitness blogs: "It is one thing to look at someone's blog or pictures and get inspired and want to try to be the best you can be. It's a totally different thing if you want to be them, and you want to change yourself into something you're not, leading to self-esteem issues. As a self-proclaimed nerd, I follow the blogs of a lot of professors and doctors who lift, but different things inspire different people, so you have to find that something that hits that emotional chord in you. Take some time to search through the web and keep a balance of people who

are into different things so you get a broad perspective on fitness."

Why it's awesome: As well as being a dietitian, exercise physiologist and personal trainer, Gabrielle Maston has also dabbled in professional Brazilian dancing, bikini comps, gymnastics, aerobics and (most recently) triathlon. As a self-admitted sports and training nut, there are few exercise avenues she hasn't explored, though not without casting a critical eye over them first. Her blog is a collection of her research and her rants designed to help you make an educated decision when it comes to your health and fitness.

There is also plenty of (realistic) advice on nutrition. Whether it's pre- and post-workout snacks, how to avoid over-indulging on the booze at parties or whether or not you should take beta-alanine supplements, Maston has got your questions covered.

“
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”

THE PERSONAL TRAINER



“
I AM
PASSIONATE
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ACCESSIBLE
TO EVERYONE
”

THE PRO: Jess

Robinson, Sydney

THE BLOG: Lazy Girl Fitness (lazygirlfitness.com.au)

It's great for: Free workouts and a nifty exercise index

On fitness blogs: "Look to people who have a balanced approach, and whose ethos and goals seem aligned with yours. I like to follow the people that really sweat – the ones that work hard and inspire me to work hard too. They'll share their workouts for others to try, blog posts on the ups and downs of training (and life) and their pictures aren't always 'pretty'."

Why it's awesome: Lazy Girl Fitness it quite possibly the simplest, most easy-to-use fitness blog ever. "I am passionate about making fitness accessible to everyone, including those that may not have the time, finances, access or confidence to get help through any other means," says Robinson. She posts loads of workouts, most of which require zero gym equipment, making it the ultimate destination for DIY gymmers. If you are looking for a longer term, goal-specific regime, there are several 28-day workout plans designed to get you ripped in all the right places.

All exercises have a matching demonstration, located in the pictorial exercise index. Between posting workouts, Robinson also reviews products, interviews people on their fitness ideas and raves about her dog.





THE COACH

ANN RAZONSKI

THE PRO: Nia Shanks,
Kentucky

THE BLOG: Lift Like a Girl
(niashanks.com)

It's great for: Finding strength-training workouts, advice, technique etc.

On fitness blogs: "It's a mixed bag. Sure, there's some downright terrible information and products sold online. But, there are some excellent resources as well. People definitely need to use caution when buying products online. Asking 'How can I look like her?' or 'How can I fix my flaws?' is the wrong approach. The real question is, 'How can I become the best version of myself today, tomorrow, and next year?'"

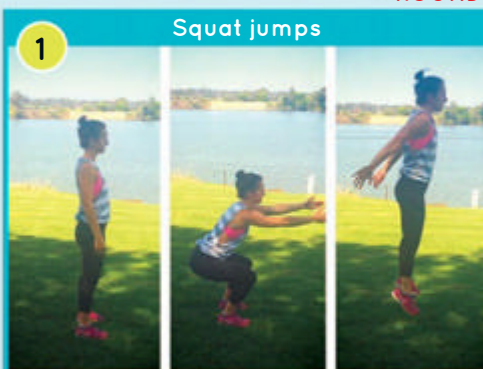
Why it's awesome: Anyone who is hesitant about trying weights training needs to get on over to Lift Like a Girl. Nia Shanks wants everyone who reads her blog to forget about training to be skinny and start focusing on "training to be awesome". There is almost too much information here on technique, different exercises, different goals, goal setting, motivation, and the list goes on and on. If you're after specific information, head to the Tutorials section of her extensive blog and choose from a plethora of different topics and video demonstrations all performed by Nia. Shanks has dedicated a part of her blog just to Weights Training 101. This includes a whole lot of reasons why women should weight train (according to Shanks), training tips for getting started and a collection of features on common mistakes made by newbies. If you're a strength seasoned pro and you're after new and exciting ways to change up your workout, Lift Like a Girl is chockers with free programs. ■

THE 30-MINUTE NO-EQUIPMENT WORKOUT

Jess Robinson/ Lazy Girl Fitness

45 seconds with 15 seconds rest, three rounds with a one-minute rest between rounds

ROUND ONE



1

Squat jumps



2

Donkey kicks



3

1-LEG

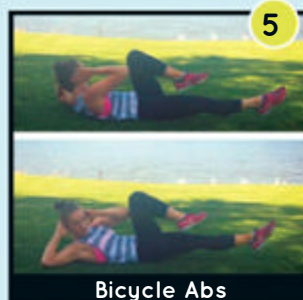
2-LEG

1 or 2-leg Bridges



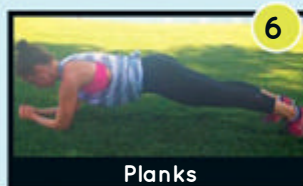
4

Push-ups (knees or toes)



5

Bicycle Abs



6

Planks



7

Lunge Jumps

ROUND TWO



Tabata Burpees

IT'S YOUR SPORT



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CHOOSE YOUR OWN ADVENTURE

You could try guesswork to hit your fitness goals, but if you're gunning for faster (not harder), knowing the basics of how your body responds to workouts could save you a whole lot of disappointment.



Words: Dominique Suriano

Setting workout goals is the easy bit. Most of us have a vision of how we want to look or feel. When it comes to how to get there, conviction is trumped by head-scratching. Fact is, the human body is among life's most intricate systems and few of us (biochem physio double majors notwithstanding) have more than a vague idea about quite what's going on when we haul weights, sprint without rests or run 10 km. The fallbacks are often myths, bro science and logic – none of which necessarily has any correlation with fitness goals. (Not so long ago, people were doing 60-minute cardio to lose fat for goodness sakes.) Thanks to all the scientists that track fitness progress in labs, we can now gauge with relative accuracy how our bodies will respond to a certain workout regimen. Whether you're after ripply bits on your midriff (that variation on a six-pack that reconciles buff with feminine) or feeling like the Energizer bunny even after a long day at work, our go-to experts have got the intel to get you there via the shortest possible path.

➤ YOU WANT... A SMILE ON YOUR FACE AND A WIRED BRAIN
➤ YOU NEED... REGULAR AEROBIC EXERCISE

The cranium, aka noodle noggin, forgetter of important passwords, and approver of that last drink we definitely didn't need on Saturday. The psychology of exercise is a vital component to a successful fitness regime. That runner's high you get after completing a 30-minute jog on the treadmill can be the complete driving force in forming exercise as a habit for your

➤ YOU WANT... A FASTER METABOLISM

➤ YOU NEED... SURYA NAMASKAR (SUN SALUTATION, YOGA)

Digestion and metabolism are not one and the same, but they certainly need to work together for optimal workout benefits. Digestion involves the breaking down of food and distributing nutrients throughout the body while at the same time getting rid of the any waste. Metabolism is when your body uses the energy and nutrients from the digestion process to aid workouts and also to process food in everyday life. For your metabolism to work properly, the digestive system needs to be feeding it the right nutrients for exercise. Likewise, if your metabolism isn't so great, the digestive system ends up storing excess calories as fat, so both need to be working in tandem for your body to completely benefit. After only 10 minutes of exercise, your bloodstream contains more metabolites than when you started, and consistent exercise stimulates long-term changes in metabolism.

During weight training, the digestive system competes with the muscles for all that blood flow that's occurring during a workout. Whichever one has the heavier load wins this epic showdown, so it's important to have a specific eating schedule that favours your muscles since they need the blood supply a lot more than the digestive system (he is a bit greedy it seems).

Melbourne-based PT and elite athlete Sheena-Lauren Steinert Steinert recommends watching what you eat pre-

workout.

"My number-one rule before working out is to have something in your belly.

"An active body is a raging fire and food is like its coal. If there is no coal, your body will use what it has, which can sometimes mean hard-earned muscle from your last workout!"

While some science says carbs pre-workout increase workout intensity and duration, offsetting any fat burn impediment, Steinert advises clients to skip them pre-workout. Small meals high in protein and low in carbs encourage the body to use its own fat stores for fuel, she says.

Along with diet, workouts that strengthen abdominal muscles support optimal digestive organ function. Try a yoga exercise, surya namaskar, to increase heart rate and strengthen your core.

Give it a burl... Do a set of 12 Surya Namaskar poses early to mid-morning. Poses such as Hastauttanasana (raised arms pose), Hasta Padasana (hand to foot pose) and Bhujangasana (cobra pose) benefit the stomach muscles and posture.

For diet, Steinert says great pre-workout foods include scrambled eggs (three egg whites and one egg yolk, diced tomato and onion), half a banana with one tablespoon of peanut butter (100 per cent roasted peanuts), or a protein shake made with water.

body. So what's happening to the ol' thinking cap when we hit the gym at 5am?

During an intense aerobic workout, the extra blood pumping in the body delivers oxygen and glucose to brain cells. Every time you move a muscle, hormones are sent to the brain, which mix with a chemical called the brain-derived neurotrophic factor (BDNF). This creates brain cell growth, helps mood regulation and buoys the brain's learning areas. Real-world translation: extra smarts. Even briefly exercising for 20 minutes facilitates information processing and memory functions according to a study by the Department of Exercise Science at the University of Georgia.

"Longer periods of aerobic exercise have been shown to result in the release of endorphins that act as an antidepressant and make you feel

happier as well as healthier, giving you that feeling of relaxation and renewed optimism after a good workout," says exercise physiologist and head of fitness at Fitness First Rob Hale.

All exercise elevates neurotransmitters in the brain, releases serotonin, dopamine and norepinephrine. This means that while you're feeling immortal, your brain is also improving in attention, perception, motivation, arousal and focus. How does that benefit everyday life? You'll be more productive in the office, more energetic during the day, have a sharper mind for that Sudoku puzzle and remember to return the boss' voicemail.

Give it a burl... Do a 30-minute circuit workout before you start the day. Incorporate jumping jacks, low side steps, runner's squats, jump rope and jogging or cycling.

> YOU WANT...TO IMPROVE YOUR GENERAL HEALTH

> YOU NEED...DYNAMIC MOVEMENT TRAINING (DMT)

We all know that any form of exercise makes our hearts thud faster than usual. During this phase, more oxygen needs to get to your muscles from the small blood vessels. The lungs breathe deeper to ensure that the delivery runs smoothly (if only our online shopping worked just as well)! In cases of cardio and aerobic exercise, it means that it's harder to complete a full workout without needing to rest because our body is in overdrive. If you are aiming for a longer workout, practice makes perfect – the more you work out in small or slow doses, the easier it is to lengthen the time for exercise so that you can complete a full 30 to 40-minute cardio sesh without stopping for a breather.

"DMT basically combines strength training and cardio training into one and because of the energy, demanding movements actually deliver more results in less time," says Hale.

"We know from initial research that dynamic movement training improves muscle activation, is more energy demanding for 30 per cent more accelerated fat loss and enhances how the body functions to improve performance at work, in life and in sport.

"In addition to physical benefits, there are significant emotional and mental health benefits of this type of training, positively contributing to your muscle, heart, and brain health."

Another effective way of improving heart health is long-distance jogging (yep, it's that simple.)

"LSD (long slow distance) cardio training means going for a five km or 10 km goal, compared to SS (steady state) cardio, which keeps the heart rate approximately 65 to 75 per cent, allowing you to complete a certain duration like 20 minutes or 30 minutes," says Hale.

Give it a burl... Join a DMT gym class that runs for 15 minutes, 30 minutes or 45 minutes so you have fast access to equipment. If you prefer to work out on simpler terms, do a 20 to 30 minute jog at least three to four times a week. (It typically burns between 240 and 400 calories for a 68 kg person.)

> YOU WANT...TO BUILD MUSCLE FASTER

> YOU NEED...SPLIT TRAINING STRENGTH WORKOUTS

The process of muscle growth may sound like something out of *The Matrix*, but it definitely proves just how hardworking our bodies can be to guarantee ultimate domination. Muscle growth is all about the process of healing – when we lift weights, our muscles incur microscopic damage in their fibres and connective tissue, making them fatigued and sore. From there, the healing process takes effect when specialised cells (called satellite cells – nothing to do with TVs) begin fusing together and attach to the damaged tissue. The satellite cells fuse with muscle fibres, increasing cross-section thickness, and eventually transitioning into new protein strands. Components of the cells are then used to create additional strands as well. These strands increase both size and strength of muscle fibres, which result in the increase of muscle mass when you lift regularly. The

resting period after a workout is vital at this stage – the healing process needs to take effect when you aren't lifting weights or extensively using your muscles.

"Recovery is one of the most important components of any good training programme and the amount and timing of recovery should be integrated into your program based on the type and frequency of exercise you are doing," says Hale.

"Serious strength training designed for changes to your muscle mass, tone and strength should overload your muscular system enough that you experience some soreness in the muscles you targeted."

It was once believed that the soreness you feel (aka delayed onset muscle soreness, or DOMS) 24 to 72 hours

or more after a workout was a build-up of lactic acid, which muscles produce as they use energy. But instead, it is now believed to be a direct



PHOTOGRAPHY: THINKSTOCK

result of the muscle tearing. When DOMS disappears, it usually means that the muscles have healed. But you don't have to wait until then to continue with exercise – as long as you don't over-exercise or over-stimulate your body.

That's not to issue licence to kick back in a hammock with a tub of Heston popcorn. Even though it takes between a few days and a week for your muscles to recover from a workout, there is no set amount of days that we are recommended to rest. The best option is to listen to your body – it's not wise to work out extensively on a set of sore muscles because that is what leads to larger muscle tears. Taking it slow and eating the right foods to aid recovery is key. Recognise the difference between pain and soreness,

and if you feel chronic muscle or joint soreness along with impaired physical performance, you need to slow down and rest easy.

"DOMS can typically last anywhere from 24 to 72 hours and occur within the first 24 hours post training. Therefore it is advised to have 24 to 48 hours rest between heavy strength training to allow your muscle to recover properly before overloading them again," says Hale.

Generally, the older you are, the less time you need to heal as the body is most likely in its most comfortable form in the later stages of life. Healing and growth is most successful with rest after eating a meal of carbohydrates, protein and fat immediately after a workout. Protein provides raw material that can be used to complete

the healing process.

"On completion of my workout I am sweaty and exhausted. My body is in overdrive begging for nutrients to repair and recover with so they can be bigger and stronger tomorrow. I always have a good-quality whey protein shake on the ready as it is fast digesting, making for quick delivery to my exhausted healing muscles. If I have the time to sit down and eat a small meal immediately (within 20 minutes), I will ensure my meal contains a good source of fast-digesting carbs and protein," says Steinert.

"I want carbs in this meal as not only will it help to increase my energy levels but they will be used to help better the efficiency of getting protein to my tired and damaged muscles rather than be stored as fat. We

must remember that when we lift weights we are breaking muscle fibres, so we need to ensure they repair optimally for stronger regrowth, which means stronger and more toned muscles."

Give it a burl... Do a split-training program where you train a different muscle group on different days to speed recovery. Follow a five-day schedule that mirrors a pattern such as: legs and abs on day 1, chest on day 2, back and abs on day 3, rest on day 4 and shoulder and abs on day 5.

For diet, Steinert recommends post-workout meals that have 150 g sweet potato with 300 g cottage cheese, one chicken breast with 125 g sweet potato, or 1.5 bananas with 2 tablespoons of peanut butter.

WHAT TO EXPECT

So we've convinced you (or at least got you curious)? Here's a heads-up.



TWO WEEKS

It mightn't show in your skinny jeans, but trust us – things are happening. According to exercise physiologists at Ohio University and Pennsylvania State University, molecular changes in the muscle begin within two to four weeks of initiating a resistance program of five sessions a fortnight. In fact, scientists found significant changes in the thigh muscles after just four workouts. "In the early phase of weight training, the body is adjusting its various systems to prepare you to become a stronger and more capable organism and it's these changes that we've found are happening at a much faster pace than anyone thought," said William Kraemer, a physiology academic at Pennsylvania State University and co-author of the study.



THREE WEEKS

This is the time you want to put the scales in the shed. If you're new to strength training, it's not unusual to gain a bit of weight as muscle tissue grows.



FOUR TO 12 WEEKS

Sure, you can't see it, but your body is getting better at recruiting motor units involved in muscle contractions (geek speak: neural activation). As more muscle fibres contract, your strength increases.



SIX WEEKS

Is Superwoman one word, or two? At this stage you can expect to be hauling as much as 80 per cent more than in your first session. Participants in one large study reported increasing their arm and leg strength by 46 to 80 per cent in six weeks.



EIGHT WEEKS

Two words: cute braces. You may have lost as much as 1.6 kilos of fat and added up to 900 grams of metabolically-active muscle, assuming you did two to three strength training sessions a week according to studies at Massachusetts' South Shore YMCA. (That extra lean body mass will incinerate an extra 35 to 50 calories a day, or half a kilo every 10 weeks!) ■

Having great legs doesn't have to mean spending hours at the gym on the squat rack. Try these seven leg-blasting moves you can do anywhere.

LOWER HALF BLAST

WORDS AND WORKOUT: MEAGHAN TERZIS (PICTURED)
PHOTOGRAPHY: JAMES PATRICK



BODY-WEIGHT SQUAT

Set: 3 | Reps: 15

WHAT IT HITS: Quads, glutes, adductors, hamstrings, hip flexors, abs

WHY IT WORKS: Helps strengthen your entire body – both your bones and muscles (and knees); increases flexibility.

1. Stand with your feet shoulder-width apart. Lower your body as far as you can by pushing your hips back and bending your knees until your thighs are parallel to the floor. Pause, and slowly stand back up.



SIDE LUNGE

Set: 3 | Reps: 12 per leg

WHAT IT HITS: Glutes, hamstrings, quads, hip adductors

WHY IT WORKS: Increases strength and power in the legs. Stepping to the side increases mobility and flexibility of the hips.

1. Stand tall with feet shoulder-width apart.
2. Take a wide step to one side. When your outside foot contacts the ground, lower your body by pushing your hips back and bending the knee. Keep your inside leg straight and foot firmly planted. Pause when the outside thigh is parallel with the ground, and then push back to the starting position.



JUMP SQUAT

Set: 3 | Reps: 10–12

WHAT IT HITS: Quads, glutes, adductors, hamstrings, abs

WHY IT WORKS: While regular squats are great, squat jumps offer a new take on the traditional, one that you're definitely going to feel in your quads.

1. Stand with your feet shoulder-width apart.
2. Start by doing a regular squat, then engage your core and jump up explosively.
3. When you land, lower your body back into the squat position to complete one rep. Land as quietly as possible, which requires control.



JUMPING LUNGE

Sets: 3 | Reps: 10–12

WHAT IT HITS: Glutes, quads, hamstrings

WHY IT WORKS: An excellent functional bodyweight exercise promoting gains in balance, stability, power and speed.

1. Begin with a normal lunge, with front leg at a 90-degree angle in the squat position and back leg behind you.
2. Squat body explosively up into a jump.
3. Replace your feet in the air, moving back leg in front, and front leg in back.
4. Go straight into lunge with opposite legs. Keep chest upright and engaged throughout entire movement.

FORWARD/ BACKWARD LUNGE

Sets: 3 | Reps: 12 per side

WHAT IT HITS: Quads, glutes, abs, hip adductors and abductors

WHY IT WORKS: Excellent exercises for thighs, lunges also help sculpt your buttocks and calf muscles.

1. Stand upright with feet together.
2. Step forward with your right leg. Bend both knees until your back knee is almost touching the floor. (Don't let your forward knee go in front of your toes.)
3. Push off your right heel to bring the right leg back and step backwards. Bend both knees until back knee is almost touching the floor. (Again making sure your forward knee does not go past your toes.)
4. Come back to starting position and repeat.



DONKEY KICKBACK

Sets: 3 | Reps: 15 per leg

WHAT IT HITS: Glutes, hamstrings

WHY IT WORKS: Able to be done any time, anywhere, this move will work both your butt and your lower back — all you need is a floor!

1. Kneeling on the ground on all fours, with hands directly under shoulders and knees directly under your hips.
2. Lift your leg up until it is at a 90 degree angle. (Really think about the muscle that you are working. Squeezing your glutes and stay in control of the movement the entire time.)
3. Slowly lower your leg back to starting position.



CURTSEY LUNGE

Sets: 3 | Reps: 15 per leg

WHAT IT HITS: Abs, calves, quads

WHY IT WORKS: Builds strength in the major lower body muscles and can be done anywhere.

1. Stand with your feet hip-width apart.
2. Keeping your weight in your left foot, take a big step back with your

right leg, crossing it behind your left leg (as if about to do a curtsy). Slowly bend your knees and lower your body straight down until your front thigh is parallel to the floor, and both knees are bent at 90 degrees. Be sure to keep your abs drawn in and your back straight.

3. Switch legs. ■

THIS MUSCLE THING? IT'S PERSONAL

Skeletal muscles are a bit like Itty Bitty Bins (if you were born after 1985, don't worry, it was a thing). The big one is a sheet of connective tissue that joins up to form tendons (you need them to join your muscle to your bone to create movement). Beneath that is a bundle of muscle fibres, each containing multiple myofibril strands (told you, Russian dolls), before you get to contractile protein filaments. Finally, there are two types of structural protein, actin and myosin. When it comes to busting a move, from flipping the bird at the bloke who cut you off to hoisting a kettlebell, simultaneous activity of muscle fibres causes muscle contraction. But the real grunt work comes from your grey matter, which messages your muscle via the spinal cord and motor nerves. When muscle fibres get the memo, you have movement – the size of which directly relates to the strength of the signal, the number and size of motor units stimulated and the types of muscle fibres activated.

Fast women

If you've ever wondered why your thighs upsize themselves from nothing more than spin class or need a break after running 100 metres, blame the type of muscle fibres you got in the gene draw. While speed defines the two main muscle fibre types, the differences impact everything from body shape to athletic potential. Slow-twitch muscle fibres (type I), for instance, typically dominate in ectomorphs – think endurance athletes like marathon runners. Sprinters, on the other hand, tend to have more fast-twitch fibres (type II). The flow-on rests on fuel source – fast-twitch fibres get their energy from glycogen reserves in the muscles and liver and glucose in the blood, while slow-twitch fibres feed primarily on fat. The former doesn't depend on oxygen, while the latter does. (Now you know why those marathon runners look like praying mantises.)

WHICH ONE ARE YOU?

To gauge your dominant muscle fibre type, try the 80 per cent 1 rep max (1RM) test. You can do this with squats, hamstring curls or shoulder presses. (Do this 48 hours after your last training session so you're not fatigued.)

1. Do warm-up sets until you reach 80 per cent of your 1RM (the weight you can only lift perfectly once). If you can lift 40 kg, work your way up to 32 kg.

2. Perform as many clean reps of your 80 per cent 1RM as you can (before you feel your next rep is going to be slow or incomplete).

1-3 reps: extremely fast twitch dominant

4-6 reps: very fast twitch dominant

7-10 reps: fast twitch dominant

11-13 reps: half of one, half of the other (how democratic of you)

14-17 reps: slow twitch dominant

18-21 reps: very slow twitch dominant

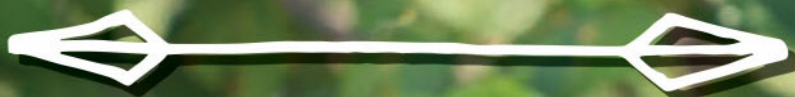
21+ reps: extremely slow twitch dominant

P.S. The cheat's way to figure out which fibres you've got is to audit your exercise history: if you blitzed the school sprint

events, you're probably fast-twitch dominant. If you do better over distances, chances are you're slow-twitch dominant. ■



DYO MICRO WORKOUT



MIX, MATCH, MOVE



Got ?s Email me
nikki@thevitalitycoach.com.au



WORDS/WORKOUT: Nikki Fogden-Moore (pictured)
PHOTOGRAPHY: Sam Frysteen tinboxstudios.com.au
GET THE GEAR: Nike trainers, Lorna Jane muscle tee and crop,
Lululemon short



If you've eased in to the year hedging your bets and hovering at the edges (holding back because in a crazy way it makes you feel like you won't fail...say what?), now's the time to lose the timid factor. As my t-shirt attests, our motto for March is 'Be brave!'. We're not talking about tiger enclosures or quitting your job to make jewellery out of Mason jar lids (well, they've got to go somewhere). This is about backing yourself and trusting that you now know enough to apply your knowledge to designing your own super-efficient micro workout (DYO is the new DIY) that fits seamlessly into your day. (I just removed the biggest excuse you had for piking.)

To ensure that your workout is both safe and effective – there's no point capriciously whacking a few sit-ups onto the end of *Suits* – there are training wheels. We've created a modular template so you can effectively drag and drop the moves that meet your goals and time frame to come up with your own tailor made workout. Because analysis paralysis (condition in which too much information or choice stops you from doing anything) is the second way your brain will try to worm out of doing something it's not sure it can, we've included a reference guide to the basics without unnecessary clutter. If you do get stuck, send me an email. Brave (but not silly), remember!*

THE TRICKS OF THE TRADE

- 1 **PLAN YOUR WEEK** ahead – what days and what time slots
- 2 **SCHEDULE** your workout INTO your agenda
- 3 **ORGANISE** a workout buddy or friend or sitter if you have a family – both will keep you accountable
- 4 **'DRAG AND DROP'** from the exercise list to create your personal program and mix it up each week

Master the exercises but change the order each week and increase the intensity or reps as you grow stronger and more confident (read: ballsy) with technique.

E.g. MY WEEK

How much time can you plan in for each day and what is your focus?

DAY	Time available	When am/pm	What I will focus on with my workout today	TICK IT ONCE IT'S DONE
MON	45 min	Am	Up-tempo	
TUES	30 min	Am	Technique	
WED	Rest		Resting and eating healthy!	
THURS	60 min	Pm	A fun session with a friend	
FRI	15 min	Am	OM TIME	
SAT	45 min	Am	Family fit or REVERSE my combo	
SUN	60 min	Pm	Family fit or REVERSE my combo	

Remember, this is designed to give newbies a no-excuses kickstart SO if you have more time the schedule the time in and design your workout around it.

*OCD NOTES (you know who you are...Ms Never Enough):

Make sure you have rest days! Don't go hard all the time as your body won't recover and it will never bring you the results you desire. Ultimate health and wellbeing comes from a balanced perspective as well as a balanced workout plan. It's a lifestyle, not a chore.

MY 7 TIPS FOR SUCCESS

1. Find exercises you love
2. Mix up the order of things
3. Take your gym outdoors
4. Bring a friend and put an interval timer on your phone
5. Pump up the sounds
6. Be grateful that you're able to plan and create the body and the life you want. Gratitude for where you are at now is integral to getting to where you want to be. If you are constantly telling yourself you're not fit, healthy and happy enough, it will manifest. Focus on the positive.
7. **REALLY** commit to a healthy mind as well as a healthy workout regime.

Pssst...a bonus tip that always works:

Add your focus for each session so you go in with a game plan. The exercises can all be the same but it's your approach and attitude towards the session that will make the difference!

HOW TO DYO WORKOUT!

TIME

select a # of exercises per box
15 MINS

1 to 2 exercises per box

30 MINS

3 exercises per box

45 MINS

4 exercises per box

60 MINS

5 exercises per box

LEVEL

base your Reps on the below
NEWBIE

Getting back into it 10–15 reps x 2 rounds

REGULAR GROOVER

15–25 reps x 3 rounds

ADVANCED TO SUPER NOVA

25–30 reps x 3 rounds



Here's a sample workout I did from the DIY list below

NIKKI'S MONDAY MOJO WORKOUT

Time: 30 min EXPRESS SESSION

LOCATION: I'm on the road with an early start, so it's a hotel room

GOAL: Feel recharged and kickstart metabolism – but not tire myself out

MY 30-MIN SESSION

- » cardio w/up (1 round + 1 at the end)
- » 25 mountain climbers
- » 3 min skipping

LOWER BODY (2 Rounds)

- » 25 wide leg squats – arms out in front (no weight with me)
- » 25 static lunge & twist

UPPER BODY (2 Rounds)

- » 30 push-ups
- » 30 plank toe touch and knee tuck combo

CORE (20 Rounds)

- » 35 crunch & reach
- » 60-second leg lift with arm combo

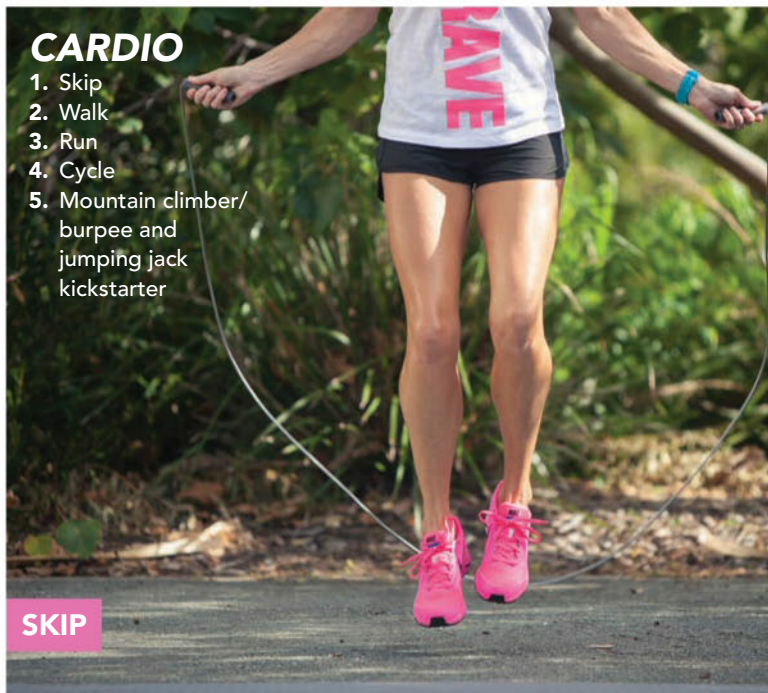
OM MOMENT – to end

- » 5 mins meditation to start my day

CARDIO

1. Skip
2. Walk
3. Run
4. Cycle
5. Mountain climber/ burpee and jumping jack kickstarter

SKIP



LOWER BODY

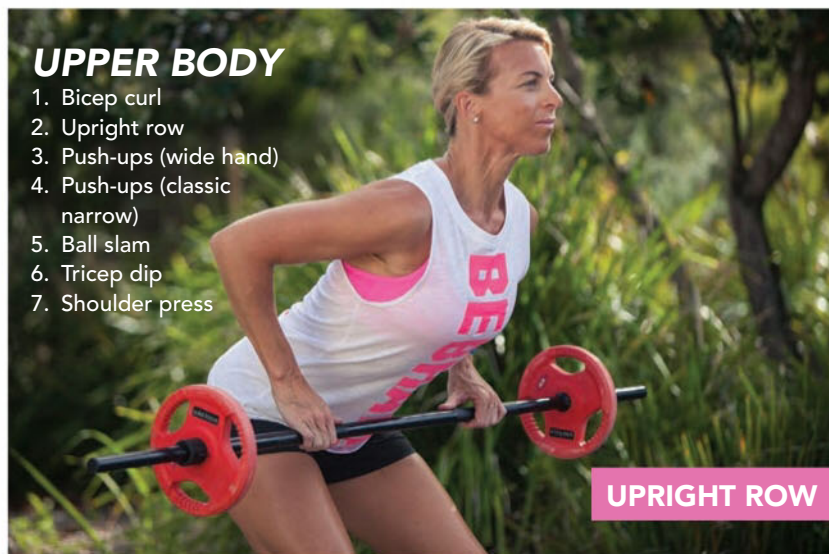
1. Wide-leg squat
2. Standard squat with front raise
3. Lunge and twist
4. Prisoner squat
5. Step-up
6. Skater lunge
7. Mountain climbers
8. Wall squat – hold as long as you can

LUNGE AND TWIST



UPPER BODY

1. Bicep curl
2. Upright row
3. Push-ups (wide hand)
4. Push-ups (classic narrow)
5. Ball slam
6. Tricep dip
7. Shoulder press



UPRIGHT ROW



BICEP CURL



PLANK

CORE BOX

1. Plank
2. Side plank
3. Side plank leg raise
4. Push-up plank knee tuck combo
5. Plank side toe tap
6. Crunch
7. Crunch and reach
8. The lower leg lift combo



THE LOWER LEG LIFT COMBO

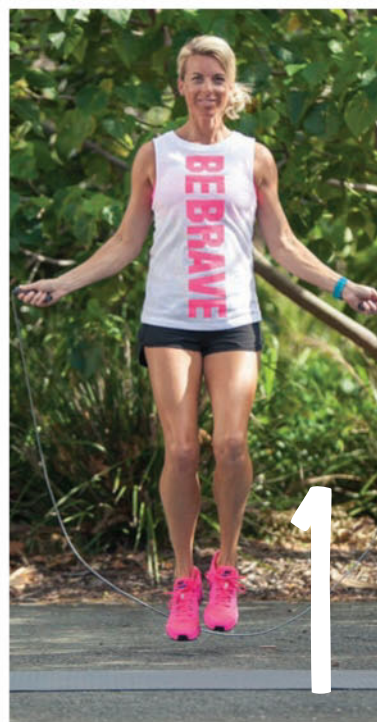
THE OM FACTOR

1. Make time to meditate. Build up 2 min, 5 min, and 10 min + meditation
2. Child's pose to end your session



CHILD'S POSE

THE HOW-TO ON 5 OF MY FAVOURITES



1

SKIPPING

Skipping is the ideal way to warm up on the spot. In fact, if you're keen, I'd suggest putting some 2-3-minute skip sessions in between each exercise to rev up the cardio element. Start slow to get a good rhythm – skip like you run, with one foot at a time – think Rocky!



LUNGE & TWIST

This is a great exercise that gives the classic lunge some extra oomph and works your core. Stand with both feet shoulder-width apart in start position and place your weight in the middle. Step forward with your right leg and lower your body to the ground, keeping your back straight and your shoulders back. Twist to the opposite side and then immediately step up – pause then and take the next leg into a lunge. Repeat on the other side as you walk forward in a travelling lunge. I do 5 lunges out and 5 lunges back.

WIDE LEG SQUAT WITH WEIGHT AND FORWARD RAISE SQUATS

Weighted squats with standard feet or wide leg are the exercises I usually start on as they warm up your whole body. This exercise fires up your biggest muscle group and ensures a great start to the workout. Hold the kettle bell/ weight with straight arms, with your shoulders back, and with your feet slightly wider than shoulder-width apart. If you want to engage your inner thighs, take your feet into a wider squat. Keep your shoulders back at all times and your eyes forward while you take a deep squat, with your thighs parallel to the ground. Your weight should stay in the same position. Then rise back to the starting position. Avoid over-extending your knees on the return extension.

Do the same thing in a wide leg squat – activating your inner thighs.



PLANK TOE TOUCH COMBO

Start in a full plank with your arms straight and under your shoulders, your back in line, and your hips even. Engage your abs, and then gently move your left knee into your chest, across the other side and then extend the leg out to the side, touching the toe to the ground at a 45-degree angle. Repeat this in reverse – toe touch, knee tuck, knee crossover and return to the starting position. Swap sides and then repeat 10 to 15 times.

* ADVANCED VERSION

Do this with feet resting on a fit ball to decrease stability and add resistance required to keep your core engaged.

MEDITATION AND MOJO

Taking time to centre yourself is so important for vitality and wellbeing. Start with some relaxing music, sit in a comfortable position and concentrate solely on your breath. Feel your lungs fill with air as you inhale and see your tummy rise as you take good-quality breaths into your lungs – release and feel the air exhale. Keep your shoulders relaxed and your eyes soft. I like to look at nature or the ocean. If I am travelling or not able to see a lovely view I end my workout with sitting cross-legged with my eyes closed and visualise the beach to help guide me into a quiet mental state.

This is something that can add so much value to your day with so little effort. The biggest challenge for most is to fight the feeling to move or be doing something. Take the moment to recharge.



Reminder: looking your best is also about feeling good from the inside out, so banish that negative self-talk and really focus on the best of you. I've just set up a free 4-week program called the Vitality Road Map™ (you can sign up at thevitalitycoach.com.au). It's designed to integrate what I write in *WH&F* with my three pillars for true vitality: Fresh Air, Fresh Food and most importantly, Fresh Perspective.

Happy mojo-making, team! x Nikki ■



R

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Fudge THE figures

Not quite fudge, not quite ice cream, these super low-carb, protein-rich squares of peanut buttery bliss make a decadent post-workout recovery snack. Only thing is, you can't have dessert 'til you've finished your sets.



chocolate variation

PEANUT BUTTER COOKIE DOUGH PROTEIN SEMIFREDDO

Makes 6 squares

WHAT YOU'LL NEED

- 1 tbsp coconut butter, softened in microwave (you need the butter, not the oil, to ensure it hardens)
- 1 scoop peanut butter-flavoured protein powder (or use vanilla and add ½ tbsp melted natural, unsalted, no added sugar peanut butter to the mix)
- 4 tbsp unsweetened almond milk

WHAT YOU'LL DO

Line a square glass dish or BPA-free plastic container with cling wrap. Place all ingredients in a bowl and combine using a hand blender or whisk. If you notice powder lumps, flatten against the bowl with the back of a spoon and blend in. Pour mixture into dish or container and refrigerate for two to three hours or until set. Alternatively, put it in the freezer.

Recipe: Dr Sara Solomon, drsarasolomon.com

Ingredient Cheat Sheet

What it is: Coconut oil

How to use it: Coconut oil is simply the oil that has been extracted from the meat of the coconut. It's delicious in stir-fries and baking.

What it is: Almond milk

How to use it: This ground almond and water mix can be directly swapped for milk. It has no soy, no lactose and a low calorie count. ■

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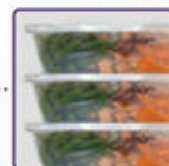
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Delicious food. Four-poster beds. Time to yourself? This is no ordinary health retreat. It's Cabarita Ocean Health Retreat – recently opened and set to make a stir in the wellness market.

Words: Charmaine Yabsley

Entering the white pillared walkway to Cabarita Ocean Health Retreat in NSW's Northern Rivers can be discombobulating. I know that I'm booked in for three days of reduced calories, intensive exercise and meditation, but the place is dripping with glamour. Sparkling chandeliers hang from the loft-height ceiling, and natural light floods through the wraparound windows. A cosy fire is burning brightly away in one corner, creating a cosy nook to relax in, while comfy chairs are dotted here and there, inviting me to sit down, take a load off, and drink some mint-flavoured filtered water.

Run by health retreat extraordinaire Brook Ramage (he has previously managed the Golden Door and Camp Eden), there's a few reasons why this place is different from the rest. "It's the only health retreat in Australia situated on the beachfront," says Ramage. Indeed, the area of Cabarita is renowned for its untouched beauty, even though it's just 30 minutes from the busy, touristy Gold Coast. "Plus, there's only 12 suites, so our groups are small and intimate, of no more than 24 people." This means, as I found, that the groups were small enough to know everybody's name, but the large size of the property (six acres), meant that I never once felt crowded. Guests

are encouraged, not forced, to participate in the activities, and when the exertion gets too much, or you just want some quiet, contemplative time, you're welcome to retire to your garden view room, some of which have balconies that welcome the ocean breeze. Each room has a TV (ideal for those who needed their *Masterchef* fix), free wireless Internet, a luxurious sunken bath and power shower in the en suite and (herbal) tea-making facilities. In short, everything you need to feel at home.

My invitation to stay here couldn't have come at a better time. Six months after the birth of my second child, I was suffering from exhaustion, post-natal depression and lack of motivation. Needless to say I also had a few extra kilos I still hadn't shed (and couldn't find the time nor inclination to). I was overdue for some hardcore nourishing of the mind, body and soul.

Arriving on Sunday afternoon in August, brilliant blue skies and a balmy 24 degrees (this is the Gold Coast area, remember), I was warmly welcomed and taken to my sumptuous room. Two (two!) four poster beds were mine for the choosing (unless you come accompanied, it's rare for guests to share). I sat on my balcony, listening to the crashing of the waves and felt relaxed and free for the first time in a long while.

That afternoon, myself and five other guests met for a brief induction and overview of our week. This involved a half-hour consultation with naturopath Peter Rule, an introduction to the beauty treatments on offer and (gulp!) fitness trainer. Each guest was there for their own reasons, although mainly we all wanted to take a break from the pressures of life within the confines of five-star surrounds. I was the only person who was determined to lose weight, others were interested in learning new ways to work out and up their exercise program, while others were looking forward to some healthy time out with their partner.

A half-hour consult with Daniel Nimmo, the personal trainer, was one of the most eye-opening 30 minutes of my life. Despite two pregnancies, which were beset with health issues, I still considered myself relatively fit. I knew that I had to tone up, but I thought that my body was in relatively good shape considering its journey over the past six years. I was in for a shock. Nimmo measured my fat levels (embarrassingly high) and BMI: I needed to shape up. Then the next shock occurred. According to Nimmo, I didn't need to try and find 60 minutes every day to work out, instead, he caters to the belief that seven minutes of high-intensity exercise a day was all we need to boost metabolic rate and burn fat. Luckily, my upper and lower body strength were reasonable, so my forward focus was about moving as fast as I could for just seven minutes a day. I'm sure I spend more than that on Facebook each hour, so it was easy to see how I could include this in my daily life.

A 30-minute session with Rule was also informative, and comforting. My body was suffering from a tremendous amount of inflammation, which according to Rule was a contributing factor to my depression. (A spate of research shows that inflammation can cause an imbalance in the brain, leading to depression, mood swings and other issues.) Luckily, the talented chefs, Brendon Harris and Louise Miller, specialise in anti-inflammatory foods. Which doesn't mean mung beans and sawdust. Instead, over the course of four days, I ate some of the tastiest, most beautifully prepared and presented meals I had ever enjoyed. It was certainly easy to see why it's been voted the Best Spa Food by *The Age*. After an evening meal of baked fish with turmeric and ginger followed by a bowl of fresh fruit, I headed to bed for a night of uninterrupted sleep.

DAY ONE

Rising at 6am is normal for me, but donning my gym gear at this hour isn't. However, I was rested after nine hours of deep, dreamless sleep, so headed downstairs ready to start my new, healthy, inflammation-free lifestyle. We were given a shot of apple cider vinegar (it's great for aches and pains and to help shift kilos) before heading outdoors for a warm-up session of qigong. A gentle, easy way to start the day, I could feel my skin tingling with awareness within minutes of starting the routine. Alongside group fitness leader Kate MacLennan, with blood pumping and now wide awake, we walked the 134 metres to Cabarita beach. Unlike other health retreats that tend to keep you enclosed from the real world for the time of your stay, we were allowed out into the real world. And what a world it was. Cabarita Beach is an untouched stretch of uncrowded, glistening white sand: nature at its best. An hour's easy walk along the soft, white sand towards the headland (which meant some stair work), found us spotting humpback whales and dolphins and swimming among the early-morning surfers. Eyes shining and grins plastered on our faces, we headed back for a nourishing but tasty breakfast of toasted muesli with berries followed by buckwheat pancakes and maple syrup. We were encouraged to drink turmeric tea for its anti-inflammatory properties, a warming way to end the meal.

The rest of the day set the scene for the rest of my stay. Rise and shine, yoga and qigong, beach walk, breakfast followed by intensive exercise, health talks, morning tea, stretching, such as yoga, Pilates or calisthenics, or stand-up paddle boarding and a bike ride, or a cooking lesson followed by lunch. Once again, lunch was mouthwatering: macadamia-crusted snapper with Jerusalem artichoke, cauliflower and parsnip puree anyone?

The afternoon was ours to enjoy ourselves – some guests took their bikes for a beachside ride; others lazed by the

pool, went for a surf or napped in their rooms. Beauty sessions were staggered throughout the afternoon at a time to suit you. My rock acupuncture treatment (a hybrid of acupuncture and hot stone massage) was out of this world and gave me some much-needed relief to lingering stomach issues.

Dinner lived up to expectations.

After three days of beachside bliss, I was ready to see my children, but I was also feeling like a new woman. I had lost some weight, toned up, but most of all, the fog that had been following me around for months had finally cleared. This was in large part due to the amazing organic and locally sourced food, but also due to an out-of-this-world experience of swimming with the dolphins on my last morning.

I was excited about continuing to eat healthily and well, and due to the cooking lesson I'd attended, I knew that it wasn't a daunting task. Six months later, I've lost more weight and have overcome my dark days. I do seven minutes of exercise every day, and sauerkraut has become a staple in my household. Best of all, I am happier and more motivated than ever. My only regret? I could only spare three days – the other guests I spoke to after their week-long retreat vowed that their lives had changed forever. As has mine.

MY TO-DO LIST POST-HEALTH RETREAT

- ✓ **DO** seven minutes of high-intensity exercise every day
- ✓ **ADD** sauerkraut to my meals to reduce bloating and increase the good bacteria
- ✓ **AVOID** sugar as much as possible. Instead, use healthy alternatives
- ✓ **MEDITATE** or schedule some regular time to do nothing
- ✓ **DRINK** ginger and turmeric tea throughout the day
- ✓ **FISH** is a great way to reduce inflammation: aim to eat it at least four times a week ■



PHOTOGRAPHY: THINKSTOCK

WELLNESS RETREAT

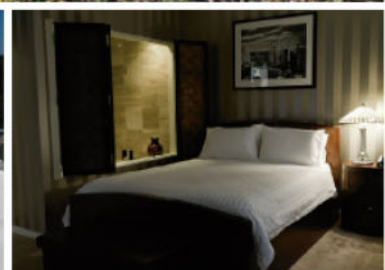
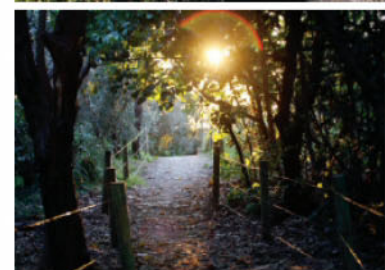


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HARBOUR POSE

If you're in Sydney and find yourself at a loose end at day break, head to Pier One's sunrise morning Vinyasa and Forest yoga class, followed by an energising juice. We can't think of a better backdrop for our asanas (even if it is upside down during downward dog). Visit balancelifenutrition.com.au to book.

ON THE FLY



Think a gap year's one indulgence too far? Wellbeing perk: extended travel can cultivate positive personality traits according to a paper published in 2013 in the *Journal of Personality and Social Psychology*. Subjects who spent prolonged periods abroad tended to out score home bodies on 'big five' personality traits including openness to experience, agreeableness and emotional stability. (Once you've booked, invest in a good travel journal and document your inner flight path as well as your geo-logistics. We love the artisan feel of these ones, \$16, from gadanke.com.)

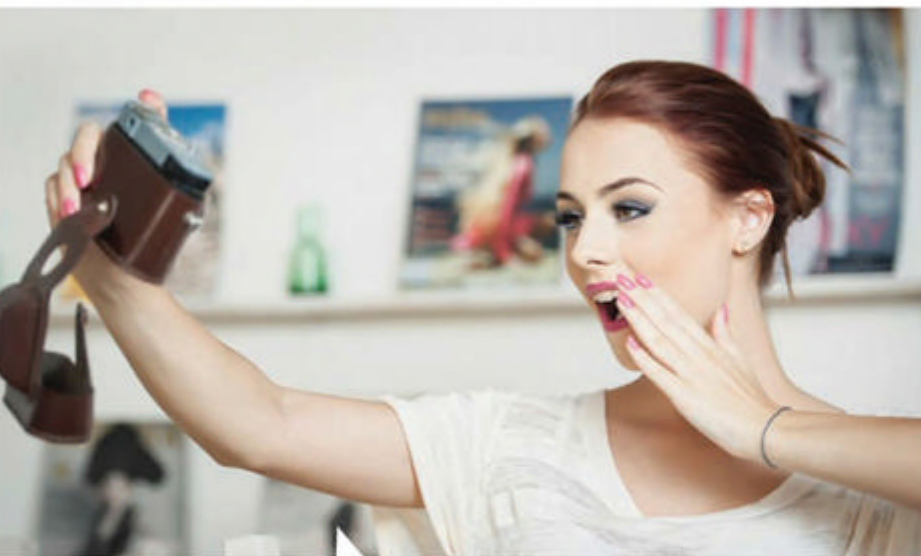


ALOHA YOGA

Yoga 213, known for its uber-hip So-Cal vibe and hip hop beats, is picking up its classes and planting them in Ha-va-ee. Described as a fusion of "yoga, music and happiness", the seven-day retreat on Maui will include blissed out tutelage (even the schedule's chilled out) in yoga, meditation and nutrition. Note the feasts plated by a Hawaiian personal chef in the penthouse above the ocean. \$2,300 plus flights, yoga213.com.au

LUXURIOUS RELEASE

Learn to let go of stress at Golden Door Hunter Valley's Secrets of Meditation and Mindfulness Retreat, run by spa industry guru Michael Hallock. Guests will explore age-old meditative techniques and learn to apply them in daily life. Think of it as insurance against getting caught up in stress. From Tuesday 14 April, goldendoor.com.au



ACTION SELFIES

Dear acquaintance we can't unfriend because you know our brother-in-law, no-one wants to see your mini soaps and room service on their six-inch smartphone. GoPro's new HERO4 lets you capture the interesting bits of your vay-cay (kayaking down the Mekong is cool). With a three-way selfie stick and tripod, it's the first GoPro with a built-in LCD screen (for playing back your footage). \$549, gopro.com





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FUEL IT

STARVATION SABOTAGE

Can a caloric deficit really effect lasting weight loss or does cutting kJs send metabolism plummeting (not to mention making you more food obsessed than Donna Hay)? We ask whether starvation mode is myth or fact.

Words: Stephanie Osfield

How many times have you slashed your kilojoule intake in order to look svelte for an upcoming function, summer beach season or big date? Yes, you know it's not the best long term, but semi-starvation is a seductive strategy because it gets quick results. But what about down the track? Unpack what's really going on in your body and the feel-good story quickly comes to an end. Because every time you skimp on kilojoules, you could also be causing a cascade of long-term effects that may increase the tendency to gain weight over time. "Starvation mode is a non-scientific term that describes a cluster of scientifically proven metabolic, hormonal, psychological and behavioural responses to extreme or prolonged kilojoule deprivation, which is common during many popular weight loss diets," says Tom Venuto, a well-known US fitness consultant, writer, author and blogger at Burn the Fat Blog (burnthefatblog.com). Since your body can't distinguish between extreme dieting and starving, a whole lot of negative responses can occur.



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STUDIES SHOW THAT WOMEN
WHO GO ON A STARVATION DIET,
REDUCING THEIR DAILY KILOJOULE
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LOSE ABOUT
THREE KG OF MUSCLE
OVER A 16-WEEK PERIOD.
”

Spotting the signs

When you're riding high on dopamine from people telling you how great your jeans look, it can be hard (read: hell, no) to stand back and survey the metabolic landscape. Why mess with a good thing, right? Yet many mild symptoms of undereating point to metabolic slowdown – think feeling less hungry the longer you diet or being plagued by cravings and obsessive thoughts of food. Nope, not normal. Both of these responses can indicate starvation mode. The lack of appetite is due to metabolic slowing and the increase in cravings owes to hormone changes. “In addition, your activity levels (such as fidgeting and how much you toss and turn during sleep), may have spontaneously decreased without you even noticing and your workouts may have lacked the usual gusto,” says Venuto. “The signs of starvation mode – not just decreased metabolism but also behavioural, psychological and biological changes – usually make continued weight

loss and subsequent weight maintenance more difficult.” Other neon signs include fatigue, lowered immunity, irritation, loss of libido, hair loss (due to mineral deficiencies) and feeling cold. Research is now linking these kinds of changes to weight gain, trouble with weight management and obesity.

Fluid/fat versus muscle loss

The buzz you feel when your clothes suddenly become a little looser in the first week or two of a diet is due to the burning of your carbohydrate stores (also called glycogen). “For every one gram of glycogen you burn, you also lose three grams of water, which is why it's so easy to lose a little weight when you first restrict kilojoules,” explains *WH&F's* dietitian on call, Melanie McGrice, director of Nutrition Plus clinics in Melbourne. Unfortunately, you'll regain this fluid as soon as you eat more carbs or kilojoules. As your goal is to whittle your waistline, you obviously want to lose fat, not fluid. So extreme measures are not the answer.

Most diets cause you to lose muscle as opposed to fat. "Rapid weight loss, which occurs at the start of a semi-starvation diet, can lead to an unhealthy ratio of 60 per cent muscle loss to 40 per cent fat loss," says Sarah Luck, naturopath and natural health consultant with Doctor Earth in Bondi, Sydney. "So don't be fooled into thinking that a big, rapid drop on the scales is good news." In fact, it most likely means your body is in a catabolic state, where you are exercising too much, eating too little and as a result, your body is using your muscle for fuel. As muscle is more active than fat tissue, the less muscle you have, the less kilojoules you burn. "No matter how many protein shakes or powders you consume or how much exercise you do, you won't stop the process of losing muscle if you are starving yourself," Luck warns. "To lose mostly body fat, you need to reduce body weight as slowly as possible and also exercise to maintain muscle density."

Meanwhile, chronic dieting over years can cause a condition called 'sarcopenia', which literally means 'poverty of flesh'. "A person suffering from sarcopenia can be normal weight or even underweight, but have a high body fat percentage due to loss of muscle from long periods of restricted kilojoules," says Luck. "This may cause someone in their 20s, 30s or 40s to have the same lower amount of muscle as someone in their 70s or 80s."

This clearly has a knock-on effect for your future fat loss. Retention of muscle mass is very important for health and for maintaining a healthy weight. "With age, we tend to lose muscle mass, but people who go on starvation diets tend to lose significant muscle mass," says Stephen Boutcher, an associate professor from the Medical Faculty of the University of NSW. "Studies show that women who go on a starvation diet, reducing their daily

kilojoule intake by 50 per cent, lose about three kilograms of muscle over a 16-week period. Since it has been estimated that an increase of one kilograms of muscle could use up just under three kilograms of fat per year, any loss of muscle mass can cause the opposite of the desired effect and actually result in a lower loss of fat, which is why retaining or increasing muscle mass is very important."

Metabolic go-slow

Every time you spend weeks eating barely enough to get by, you risk slowing your metabolic rate so that it is less able to burn fat. "The first part of the metabolic slowdown is 'obligatory' and occurs due to the loss in body weight," says Venuto. "So if you have lost 25 per cent of your body weight, you are a smaller person and smaller people burn fewer kilojoules. The second part of the metabolic slowdown is 'adaptive'. This means that when you restrict kilojoules and lose weight, your metabolism slows down even more than you would predict from the total weight loss alone. "This is called 'adaptive thermogenesis' and it is bad news for long-term weight loss.

Even a small adaptive decrease in metabolism can help explain why diets can make us gain weight in the long term, says Venuto. "If you combine too much cardio with starvation dieting, it can decrease your metabolism even more than starvation dieting alone," he adds. The level of metabolic slowing, which is called 'inter-individuality', can vary markedly from person to person. And what the studies are now telling us is that the metabolic 'go-slow' may be much larger than previously thought. "Though it may typically only be five to 10 per cent or even only a few per cent, the possible range is much broader," Venuto explains. "One study showed a 31 per cent adaptive decrease

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in metabolic rate. In another paper, by Professor Dulloo from the University of Fribourg, called 'Explaining the Failures of Obesity Therapy', the author concluded that some people may adapt so much that they burn between 1255 and 1674 kilojoules per day.

In light of this, it is clearly best to avoid eating plans that slash kilojoules. If you must engage in kilojoule restriction, you're far better to try intermittent fasting, also called the 5:2 eating plan, where you eat no more than 2,000 kilojoules on two days of each week and on the other five days, eat normally.

Semi-starvation should not be a weight loss or maintenance option. If you dramatically and constantly eat too little food day in and out, you also reduce your basal energy, used for basic body functioning. "One of the first non-essential processes it shuts down is the production of body heat," says Professor Timothy Gill, a principal research fellow at Sydney University's Boden Institute of Obesity, Nutrition, Exercise and Eating Disorders. "This is one of the reasons why people often feel the cold more keenly on a kilojoule restricted diet. It indicates that you are burning less energy. This is often called the 'starvation response'; because as you eat less food, your body stops using as many kilojoules. It becomes more 'efficient' because it shuts down any processes that are not essential to life." But as a result, you become less efficient at burning fat.

This may in part explain the dreaded weight-loss plateau, where, even though you are still hitting the gym and eating like a bird, those stubborn remaining kilojoules cling to your body and won't budge. Worse still, it may also be partly responsible for the rebound effect where people diet, lose weight then regain it. Research at the University of California has shown that

many people who lose five to 10 per cent of their weight through restricted eating gain the majority back, plus more. This effect is so well known that many experts now consider the adoption of restricted kilojoule plans as a predictor for weight gain, not weight loss. "Because your body has adapted to lower kilojoules by cutting some functions, when you return to eating more kilojoules you are at greater risk of gaining weight, as your body remains in that slower energy-burning mode, sometimes for lengthy periods of time," Gill explains.

Starvation stress

Kilojoule restriction can cause hormonal havoc. When you skip meals and slash your portion sizes, your body starts to think you are facing a famine. A whole array of hormonal reactions then take place that cause your metabolism to slow down and also lead your body to conserve more fat. At the same time, eating a low-kilojoule diet or skipping meals both trigger the 'fight or flight' response, leading you to release stress hormones like adrenaline and cortisol. "In the short term, these hormones give you a bit of a 'high' that increases your energy and you feel you can take on the world," says Luck. "But in the long term, those elevated levels of adrenalin literally cause your body to cannibalise itself – because adrenalin stimulates the breakdown of structural proteins in your muscles and bones. But because you associate the adrenalin rush with that initial weight loss, you may continually diet to try and maintain this feeling of buzzing with energy and the mistaken idea that you are becoming skinnier." In reality, the constant release of adrenalin is actually wasting away the very muscle that will help you maintain a fast metabolism and will help you burn more fat. "Meanwhile, it may also produce symptoms

such as allergies, accelerated ageing, insomnia, depression, decreased bone density and a suppressed immune system," says Luck.

Breaking the cycle

Though it may take months or even a year or more to slowly coax your body out of starvation mode, it can be done if you go slow and steady:

» **Eat Smarter:** Start gradually increasing your kilojoule intake to ease your body out of starvation mode. "Gauge how your body is responding to the change and increase your kilojoules every week by about 500 kilojoules until you are back up at a higher kilojoule intake," suggests McGrice. "Aim to get your intake back up to around 7,000 or 8,000 kilojoules or a little higher, to around 8,700 (considered the average intake needed by most adults depending on how active you are)." If you must do a period of kilojoule restriction, do it for several weeks, not months or years. Or do intermittent fasting – where you cut kilojoules two days in every week.

» **Engage in strength/resistance training:** Although cardio exercise, such as running and aerobics, can help burn fat, strength and resistance training should also be in your exercise mix to help conserve and build muscle. "When women perform either aerobic or resistance exercise while on a starvation diet, they will lose muscle mass, but the loss is reduced by between 40 to 50 per cent," says Boutcher. Resistance exercise (where your muscles contract against an external resistance), is a good way to combat muscle loss. In particular, weight/strength training helps maintain the 'fast twitch' muscle fibres



that we lose the most rapidly with age. Plus, it helps you burn more fat, even at rest. So invest in some free weights to bring an element of resistance to your workouts or consider trying a pump class or using the weight and resistance machines at the gym.

"Strength training is how you avoid getting 'skinny fat' – or losing muscle when you're in a fat-burning kilojoule deficit," says Venuto. "It's this lean muscle that gives a great body its shape – with all the right curves, and the strength to do everything you want your body to do." You don't need to worry about turning into the Ms Schwarzenegger. Women don't have the hormones that it takes to bulk up when using weights.

» **Stop extreme measures:** If your weight loss has ground to a halt, resist the urge to train harder and eat even less, as this will only make things worse. Instead, Venuto advises a far more balanced approach. "Don't starve yourself on crash diets, don't over exercise if you choose a very low kilojoule diet approach and above all else, don't diet chronically. You are better to train hard and eat as much as you can while still achieving fat loss at an acceptable rate, even if it takes you a little longer to reach your goal. Being impatient and using quick fixes has negative consequences, and the danger is that many of them don't show up immediately." ■

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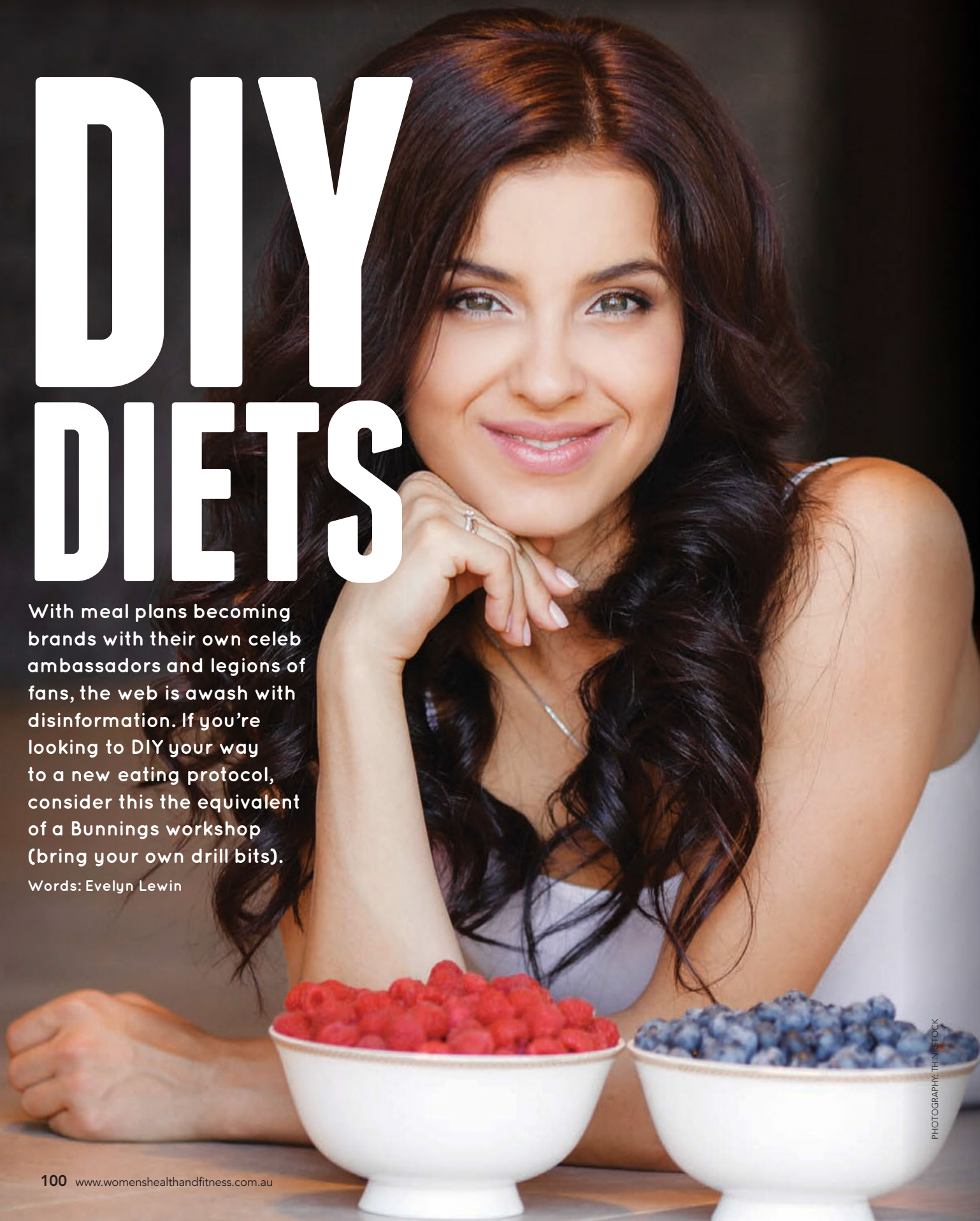
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DIY DIETS

With meal plans becoming brands with their own celeb ambassadors and legions of fans, the web is awash with disinformation. If you're looking to DIY your way to a new eating protocol, consider this the equivalent of a Bunnings workshop (bring your own drill bits).

Words: Evelyn Lewin





If you've spent the past year anywhere other than under a huge rock, you'll know that sugar's the habit-kick du jour. The sweet stuff is now being touted as a dietary poison responsible for everything from obesity to poor concentration.

While some swear that kicking sugar is transformative, others believe that ousting gluten is the answer to, well, almost everything, it seems.

Yet another posse, with its focus squarely on weight loss, posits that intermittent fasting is the best way to eat. Then there's a school of eating that eschews animal products. That'd be vegan.

While the right way of eating depends entirely on your personal health, ideological and taste imperatives, there are general pros and cons that can help sort the wheat from the non-animal eggs.

We asked top diet pros to provide a starter plan for the top diet trends, complete with tips and caveats. If you are concerned that your diet is adversely impacting your health and wellbeing, speak with an accredited practising dietitian or nutritionist before taking your diet into your own hands. It's more powerful than you might imagine.

What is it?

Sounds pretty simple, right? Just cut sugar from your diet and you've gone 'sugar free'. Well, the tricky bit is that sugar is kind of everywhere, explains food coach and personal trainer Irene Siniakis (www.ireenesiniakis.com). It hides in foods that don't seem sweet (think bread and pasta), and is usually found in the ingredient list of processed foods.

Why you would go sugar free:

Not only is quitting sugar hot right now, it might also lead to a hot body. "Sugar-free diets provide a sustained insulin release throughout the day, which is important for weight control and energy levels," explains Siniakis.

Siniakis says sugar is not just addictive (hands up who can stop after just one Tim Tam), but that it's also highly toxic. In fact, she refers to it as 'sweet poison', which makes you more prone to sickness and disease. Now that's a seriously good reason to step away from the white stuff.

Want proof?

According to new research published in *JAMA Internal Medicine* in February 2014, eating more sugar than recommended increases your risk of dying from cardiovascular disease.

Why you wouldn't:

Let's face it: the thought of never eating another scoop of chocolate chip cookie dough ice-cream is distressing. But here's the thing: "Food is fuel for your body, like petrol is to a car," says Siniakis. "If you put the wrong petrol in a car, it becomes sluggish and doesn't perform well. Same goes with your body."

While you may not wish to go cold turkey and say sayonara to all your favourite sweets, you might want to start by cutting down on sugar, at least in its obvious forms. Siniakis recommends doing so for 30 days to start with and seeing how you go.

Pantry staples

Going sugar free means stocking up on less processed stuff, and more of the good things we should all be eating. You know: lots of green leafy veges, root

vegetables, wholegrain oats, brown rice and quinoa. Siniakis says you should add lots of different colours of veges and as many varieties as possible.

The good news is that while you're cutting out sugar, Siniakis says you should increase the amount of healthy fats you're having, as this helps curb your cravings. She recommends heaps of salmon, coconut oil, avocado and flaxseed oil.

And if you're going to invest in one new 'must-have', Siniakis says make it a juicer or blender, as this is essential for delicious, filling and oh-so-healthy juices and smoothies.

add lots of different colours of veges and as many varieties as possible.



SF 5-DAY MEAL PLAN

» DAY 1

Breakfast: ½ cup oats with frozen berries and a tablespoon of LSA (linseed, sunflower and almonds) with almond milk

Snack: 1 banana and a small handful of walnuts

Lunch: 2–3 quinoa rice cakes with avocado and smoked salmon

Snack: Veggie sticks and hummus

Dinner: Grilled lamb fillets and salad

Snack: Greek yoghurt with raspberries and chia seeds

» DAY 2

Breakfast: Omelette with 2–3 eggs, spinach, mushroom and

spring onion

Snack: Green smoothie (kale, cucumber, spinach, 1 teaspoon coconut oil and pineapple juice)

Lunch: Baked sweet potato with tuna, avocado and cherry tomatoes

Snack: 2–3 protein balls and green tea

Dinner: Baked salmon with spinach, asparagus and cucumber

Snack: Chia seed pudding

» DAY 3

Breakfast: Wholegrain gluten-free bread with avocado and 1 poached egg

Snack: Veggie sticks

with hummus

Lunch: Tuna and brown rice salad

Snack: Frozen berry smoothie

Dinner: Eye fillet steak with sweet potato chips, steamed broccoli and cauliflower

Snack: Chamomile tea

» DAY 4

Breakfast: 2 poached eggs with steamed spinach, avocado and fried mushrooms

Snack: small handful of pecans and almonds

Lunch: 2 prawn and coriander rice paper rolls

Snack: 2–3 protein balls and green tea

Dinner: Grilled bass with leafy

green salad

Snack: Greek yoghurt with strawberries and chia seeds

» DAY 5

Breakfast: ½ cup oats, frozen berries and 1 tablespoon of LSA mix with almond milk

Snack: Green smoothie (kale, spinach, cucumber, 1 teaspoon coconut oil, pineapple juice)

Lunch: Tuna salad with avocado, beetroot, leafy greens and pumpkin seeds

Snack: Small handful of almonds and walnuts

Lunch: Beef stir-fry with mixed veges

Snack: Green tea and baked apple with cinnamon



THE DIET

INTERMITTENT FASTING

What is it?

The 5:2 diet (also known as intermittent fasting) is all about eating normally for five days before restricting your intake for two days a week. Accredited practising dietitian Lyndi Polivnick (thenudenutritionist.com.au) says that the calorie ceiling for women on restricted days is a tiny 500 calories (about a quarter of the average recommended for women). Men get 100 calories more.

Why you would

There are good reasons to give this diet a go, says Polivnick. "Fasting, or radically cutting calorie intake, can help the body break down fat and repair cells, reversing the ageing process, shrinking tumours and guarding neurons against damage caused by

neurodegenerative disorders such as Alzheimer's and Parkinson's," she says.

Intermittent fasting can also help control your weight. Polivnick says early research findings suggest that the 5:2 diet is as effective for weight loss as more conventional calorie restricted diets. "The 5:2 diet may help people learn that feeling slightly hungry is not the end of the world and is actually good for you sometimes... If done properly, the 5:2 diet can be really good for your health."

Want proof?

Research cardiologists at The Intermountain Medical Center Heart Institute reported in 2011 that periods of fasting reduce your risk of coronary artery disease and diabetes, and also improve cholesterol levels.

Why you wouldn't

If you've got diabetes, don't even consider this diet, Polivnick warns. Also steer clear of this diet if you're pregnant, breastfeeding or trying to get pregnant.

Lastly, you might want to give this diet a miss if you feel you can't maintain it long term. While it can help you lose weight, chances are you'll put it all back on once you stop doing it.

Pantry staples

You can keep your pantry stocked with your usual foods because that's what you'll be eating for the majority of the time. However, Polivnick also recommends buying nutrient-rich foods such as vegies, fruit, fish and eggs, as these can help fill you up on your 'fast' days without using too many calories.

» NORMAL DAYS:

On the five 'normal days' just eat normally. This doesn't mean you should go crazy. Instead, try to stick to healthier foods and eat less processed stuff.

» FAST DAY 1:

Breakfast: 1 boiled egg (60 calories)

Lunch: 2 cups of salad with 1/3 cup of lentils (154 calories)

Dinner: 85 g salmon with 2 cups of green

salad (211 calories)

Snack: Small tub of yoghurt (70 calories)

» FAST DAY 2:

Breakfast: 2-egg omelette with spinach and tomatoes (160 calories)

Lunch: Small tin of tuna in brine with mixed salad (114 calories)

Dinner: 100 g steamed white fish with 2 cups of salad (173 calories)

Snack: 1 small apple (52 calories)

IF 5-DAY MEAL PLAN



THE DIET

GLUTEN-FREE

What is it?

Gluten is a protein found in many foods, including wheat, barley, oats and rye. Christie Fischer, holistic nutritionist and lifestyle coach (christiefischer.com), explains it's the stuff that makes breads and pastries elastic and gooey.

Why you would go gluten free:

The main reason peeps go gluten free is if they have a gluten intolerance or a true inability to process gluten, which is what happens in

celiac disease. Fischer says she also often suggests people go off gluten for a period of time as a "health kick" to see how they really feel without it.

Want proof?

OK, so a new study (published in *Alimentary Pharmacology & Therapeutics* in June 2014) shows that going gluten free helps relieve the 'brain fog' associated with celiac disease. But (and it's a big but), there's not much research to support that going gluten free if you're not celiac will do you any good.

Why you wouldn't:

While there's no medical reason to cut out gluten if you're not celiac, "There's no reason to not give a gluten-free diet a go to see how you feel," Fischer says. The ubiquity of gluten in modern food may mean many of us have normalised symptoms caused by eating it. "Over time our body puts up with a lot, so if gluten is something you know you eat a lot of, there's probably more good than harm in trying to go without it for a while," Fischer adds.

Pantry staples

"In adopting a gluten-free diet, it can be very easy to fall into the trap of buying many processed foods simply because they're labelled 'gluten free'. Be careful though; just because gluten isn't in a food, doesn't mean the food is healthy overall. Many gluten-free products still contain refined sugars, other refined grains, fillers, flavours, preservatives and more," Fischer warns.

She says your best bet is to adopt a 'whole foods' approach, stocking up on fresh fruit and vegies, lean meats, seafood, eggs, nuts and gluten-free grains.

THE DIET

VEGAN

What is it?

A vegan diet doesn't contain any animal products (think meat and seafood), or foods produced by animals or insects (such as milk and honey).

Why you would go vegan?

Being vegan is not only good for the environment, it also means less animal cruelty, says degree-qualified naturopath Holly George (naturallyholly.com). Then there are the health benefits. George says being vegan helps reduce your risk of many lifestyle diseases (such as heart disease and diabetes) while supporting "A long and healthy life". Asparagus, anyone?

Want proof?

A new study, published in November 2014 by The University of South Carolina, shows you lose weight faster on a vegan diet (even if you include carbs) than you do on a non-vegan diet.

Why you wouldn't:

George says you might want

to see a nutritionist before committing to a vegan lifestyle if you have a major degenerative disease, or if you have young children. Oh, and if you can't handle the thought of never eating lamb chops or drizzling honey over your porridge again, this diet probably isn't your bag.

Pantry staples:

George recommends buying replacements for everything you feel you will miss. Think vegan butter, almond milk, mock meat and even vegan ice-cream (yep, such a thing). As George says, "You name it, they can fake it!"

Apart from that, she recommends embracing legumes, rice, quinoa and good quality breads and pastas along with heaps of fresh fruit and vegies.

"The last pantry staple will be a few good vegan cookbooks to get your creative juices flowing and help you transition to this lifestyle with a delicious bang!" says George.



V 5-DAY MEAL PLAN

» DAY 1

Breakfast: Smoothie (2 bananas, 1 cup blueberries, 20 almonds and a cup of coconut water)

Snack: Green tea with an apple

Lunch: Salad with 2 handfuls baby spinach with a grated beetroot, 1 can of rinsed chickpeas. Dressing: 2 spoons of tahini with ¼ lemon juiced, pinch of sea salt, pinch of curry powder, cumin and pinch of garlic powder. Sprinkle with black sesame seeds.

Snack: Raw vegan bliss ball

Dinner: Pumpkin soup with rye bread with olive oil and sea salt

» DAY 2

Breakfast: 1 cup rolled oats with soy milk. Top with a banana, a few raisins and some cinnamon

Snack: A peach

Lunch: Sandwich (rye bread with hummus, alfalfa sprouts, tomato, lettuce and ¼ avocado)

Snack: Blueberries with macadamia nuts

Dinner: Vegetable pasta (½ bag gluten-free pasta cooked. In a pan take 1 diced onion fried with 1 minced garlic clove. Add a can of diced tomatoes, ½ red capsicum sliced, ½ bunch basil, sliced, and lightly season with smoked paprika, chilli and salt. Toss through pasta and top with nutritional yeast flakes

» DAY 3

Breakfast: Toast with strawberry jam and Tofutti cream cheese with a dash of maple syrup

Snack: 2 figs

Lunch: Nachos (½ bag corn chips

with a warmed mexe bean mix. Top with guacamole and home-made salsa)

Snack: A green tea.

Dinner: Salad with ½ head of kale massaged in olive oil, salt and lemon juice. Add ½ cup cooked brown rice, 1 sliced apple, ½ cup alfalfa sprouts, 10 walnuts and a handful of raisins

» DAY 4

Breakfast: Smoothie (1 mango, 2 handfuls baby spinach, ½ bunch basil, vanilla and coconut water)

Snack: Hummus with rice crackers with sprouts

Lunch: Sandwich (½ avocado with vegemite)

Snack: ¼ cup oats with a few almonds and some coconut yoghurt. Top with blueberries smashed with maple syrup

Dinner: Veggie bowl (1 cup cooked quinoa with 2 cups steamed mixed vegetables. Stir through with a vegan pesto)

» DAY 5

Breakfast: Smoothie (2 bananas, 1 spoon of cacao powder, 2 spoons of vanilla rice protein powder and 1 cup soy milk)

Snack: ½ avocado grilled with soy cheese, tomato and topped with salt and pepper.

Lunch: Salad with ½ head purple lettuce with fried tempeh strips (mix with diced onion, tamari and liquid smoke) laid over diced cucumber and cherry tomatoes.

Snack: 1 cup of cherries.

Dinner: Dahl with cooked rice

GF 5-DAY MEAL PLAN

» DAY 1

Breakfast: Vegetable omelette with 2-4 eggs, and a chai latte with rice milk

Lunch: Rice paper rolls

Snack: Flax crackers and avocado

Dinner: Frittata and roast vegies

» DAY 2

Breakfast: Acai bowl with granola, fresh fruit and coconut nectar

Snack: Vegie sticks with hummus

Lunch: Frittata with salad

Snack: 2 small bliss balls

Dinner: Salmon steak with pea mash and greens

» DAY 3

Breakfast: Blueberry and banana pancakes with coconut flakes and cinnamon

Snack: Carrots with babaganoush

Lunch: Mixed salad with tuna

Snack: 3 dates

Dinner: Steak, fried sweet potato and salad

» DAY 4

Breakfast: 'Super-food' smoothie (with fruit, nut milk,

ice, protein powder, cacao and maca)

Snack: Fruit

Lunch: Chicken san choy bow

Snack: Tamari almonds

Dinner: Vegie stir-fry with noodles

» DAY 5

Breakfast: Eggs and vegies on toast

Snack: Raw food bar and herbal tea

Lunch: Quinoa salad with lamb

Snack: Yoghurt with berries and cinnamon

Dinner: Pumpkin soup





Un-DIY

Gluing together bits of dietary advice with guesswork is a bit like trying to fix your own garage door with Post-It notes. But with every second person calling themselves a health coach or nutrition consultant, finding someone with the cred to help you meet your goals is a minefield. Charmaine Yabsley demystifies diet pros.

DIETITIAN

Why you would: The accredited practising dietitian credential is the most comprehensive, clinical breed of diet pros. While nutritionists and health coaches can hang their shingle on the strength of an online course – or their own confidence in their nutrition nous – APDs have undergone at least four years of university study spanning food science, physiology, biochemistry and diet-related medical, says Melanie McGrice, spokesperson for the Dietitians Association of Australia.

An accredited practising dietitian will have the letters APD after their title.

"If you're looking to lose weight, increase your energy, or have general questions regarding your diet and what you should eat according to your weight, height, lifestyle and medical condition, then a visit to an accredited practising dietitian is a must," says McGrice.

Why you wouldn't: "Everybody would benefit from a visit to a dietitian, such as if they have questions regarding their daily food intake and requirements, and especially if they also suffer from medical conditions such as heart disease, diabetes, food allergies or food intolerances," she says.

Best for: Weight loss, increasing energy levels, balancing mood and hormone swings and those with underlying medical conditions such as diabetes, heart disease, food allergies and intolerances.

How to find: Visit daa.asn.au to find a practitioner near you.

NUTRITIONIST

Why you would: According to the Dietitians Association of Australia, "The key difference between a dietitian and a nutritionist is that, in addition to or as part of their qualification in human nutrition, a dietitian has undertaken a course of study that included substantial theory and supervised and assessed professional practice in clinical nutrition, medical nutrition therapy and food service management. In Australia, all dietitians are considered to be nutritionists; however, nutritionists without a dietetics qualification cannot take on the specialised role of a dietitian."

Why you wouldn't: If you're looking for specific medical information regarding your diet (such as foods to help you treat an illness), then you're best visiting an accredited practising dietitian. This is because an accredited nutritionist does not require training in individual or group nutrition therapy (for example, prescribing nutrition care in a hospital or private practice).

How to find: Visit The Nutrition Society of Australia (nsa.asn.au) or Nutrition Australia (nutritionaustralia.org) to find a nutritionist near you.

SPORTS DIETITIAN

Why you would: If you're exercising regularly, particularly at competition level, then your nutrition needs may need a once-over – especially if you run long distance and each fuel type has specific perks and cons. Food is a significant factor in how much energy you have and, importantly, how much accessible energy you have to train and repair post training. The right food can give you a speed, strength or endurance edge.

Why you wouldn't: If you're not working out regularly, especially at a competitive or extreme level, then a regular dietitian is probably just as ideal if you're looking for nutrition advice and guidance.

Best for: Those looking to compete in marathons, competitive workouts or long-distance events.

How to find: Visit sportsdietitians.com.au



HEALTH COACH

(otherwise known as a wellness coach)

Why you would: "A health coach takes a broad approach to incorporating nutrition, exercise, and lifestyle factors such as stress, relationships, and/or stage of life," says health coach and personal trainer Amelia Phillips. "There are loads of experts that focus on one field such as personal trainers, nutritionists and psychologists, but no one who brings this all together in an educational, accountable manner. A wellness coach will take into account all areas of your life, then educate and support you as you make the necessary changes."

Why you wouldn't: "If you need detailed help in one specific area such as having specific dietary issues, or physical injuries, or if you have a medical issue such as depression or chronic fatigue," says Phillips. "Of course you could still use a wellness coach but no doubt they would refer you on to another expert to deal with your specific issue."

What to expect: A wellness coach will follow up with a weekly catch-up either face to face, over the phone or online. Usually they have a specialist field (such as fitness or nutrition) but have been trained to take a holistic approach to wellness with clients.

Best for: People wanting a bit of guidance and accountability.

How to find: wellnesscoachingaustralia.com.au

NATUROPATH

Why you would: According to the University of Western Sydney, naturopathy is a holistic method of healing that recognises the ability of the body to overcome disease. Treatments aim to support and aid the body to heal itself with the use of herbal medicine, homeopathy, and nutritional and lifestyle advice. "Naturopathy can help where other forms of Medicine can't," says medical scientist and naturopath Annalies Corse (annaliescorse.com.au). "It takes a holistic view of your health and uses herbal medicine to help your body heal itself. These herbs work alongside a recommended nutritional program."

Why you wouldn't: "If you are non-compliant when it comes to adhering to treatments such as lifestyle modification, dietary modification or taking medicine," says Corse. Naturopathy works best when the person participates in the treatment and recognises that they are responsible for their health. "Naturopathy takes into account your lifestyle, changes in your health, sleep patterns, energy levels, allergies, mood swings, diet and medical history," says Corse. "I utilise both pathology and complementary assessment techniques, which helps me to determine if a person has compromised function in certain areas of their body, nutrient deficiencies or a reaction to your immediate environment. Herbal and nutritional medicines plus a dietary plan are recommended. Results are usually visible within weeks to months, depending on the person. Acute illness often responds quickly, chronic conditions can respond within days to months."

Best for: Those suffering from a broad spectrum of illnesses or disease states that are either acute or chronic. Some conditions naturopaths treat include: respiratory conditions; skin conditions; anxiety; colds and flu; infections; gastrointestinal and digestive disturbances; hormonal abnormalities such as menopausal symptoms; allergies.

How to find: Visit one of the Australian professional natural medicine associations. Visit nhaa.org.au, aima.net.au or atms.com

DIY DIET SUCCESS STORIES

Imogen, 46,
has lost 15 kg on the 5:2 diet in
about a year

"I'd been exercising and putting on weight, not losing it (the old 'eating extra to compensate for the exercise' trick). I'd reached a weight that was higher than my full-term pregnancy weight with my kids, and decided that it was enough. One of my clients mentioned that she had been on the 5:2 diet for two months and had lost eight kg and could still eat cake, and I thought, 'That's my kind of diet!'."

"I had tried other diets where I restricted my intake to 1200cals/day. I'd lost weight, but found it very hard, and as soon as I stopped [the diet], it crept back on."

I like the 5:2 diet because I can eat out and not constantly deprive myself of the foods that I love. I also like how easy it is, only needing to count calories two days a week, not every day.

I don't love fasting, but I accept that this diet is the one that has worked for me, and easily, without feeling deprived all the time. [If I'm craving something] I can just tell myself that tomorrow I can have that thing I'm craving. I feel much healthier overall since I lost the weight."

"I did the 5:2 diet and lost 15kg"

Erin, 37,
quit sugar five years ago

"Quitting sugar changed my life"

"Quitting sugar changed my life. Literally. Children were supposed to be extremely difficult to conceive for me. When I was struggling with digestive issues and exhaustion, my boyfriend, a chiropractor, suggested I eliminate sugar from my diet. Six

weeks later, by accident, I was

staring at a positive pregnancy test.

"I ended up with a second pregnancy right after, and the baby weight was so easy to lose. I'm actually thinner now than I was pre-babies!"

Quitting sugar was hard for me at first because I was a sugar-holic. However, it's gotten easier. Now real (processed) sugar makes me sick. I can tell immediately now if I do eat sugar because I get instant brain fog, and the issues that plagued me in the past immediately come back.

"I now have two toddlers, more focus, a thriving business, and less weight to carry around all because I gave the boot to sugar." ■

» CARB DETOUR «

Getting ketosis to work for fat loss is trickier than eating soup with a fork.
Nail the basic science, however, and it can fast-track the process.

Words: David Goding

KETOSIS FOR RUNNERS

Regular marathon runners are used to their body working under ketosis, even if they're not aware of it. This is because most carb stores run out somewhere around the 30 km mark but extra energy is needed in order to maintain pace for a further 12 km. This is the time when the amateur runner 'hits the wall', feels like they're running into a strong headwind and, dishearteningly, watches half the field overtake them. But the experienced distance runner has run the distance so many times before that their body is used to quickly switching from utilising glucose to utilising fat stores. They smash through the wall and go keto-ing to the finish line.



"If, via diet, you drop carbohydrate intake and regulate blood sugar levels by maintaining regular protein intake, the body will not deplete your muscle stores in order to source protein. If you also limit fat intake, your body will need to start accessing your fat stores for fuel.

"So, in using controlled ketosis programs, we limit your intake of carbohydrate – eliminating all grain and sugars – and maintain small-to-moderate amounts of protein, consumed regularly, and a small amount of good fats in order to induce ketosis."

Qualifying for keto

"I consistently see clients average at least one kilogram of fat loss per week while maintaining muscle mass levels over long periods," says Altman. "The controlled ketosis clients also see their abdomen and waistlines drop significantly."

Studies confirm the effectiveness of ketosis for weight loss when undertaken correctly.

Of particular note is a US study by Dr Volek from the University of Connecticut, published in the *Journal of Nutrition and Metabolism*, which compared people using

Ketosis is a deceptive, wily beast. The minute you think you've got it cornered, it slips out of your grasp and changes direction.

Appropriated and pulled apart by diets, pseudo-diets, celebrities and pseudo-celebs, ketosis still retains some of its hazy charm and elusive promise, if only we knew how to use it.

You can find parts of the ketosis promise in the South Beach Diet (acclaimed by keto-celebs Nicole Kidman, Kim Cattrall and Oprah), the Dukan Diet (followed by Jennifer Lopez and Kate Middleton) and the Atkins Diet (followed by Jennifer Aniston and Renee Zellweger). Can so many celebrities be wrong?

Dr Robert Atkins himself hyped up ketosis in his *New Diet Revolution* as "delightful as sex and sunshine, and it has fewer drawbacks than either of them."

The basic idea behind ketosis is to get your body to switch fuels from primarily carbs, its easiest and preferred source of energy, to utilising fat. A brilliant idea with obvious, exciting weight loss possibilities, but far easier said than done.

"Carbs, or sugar, are the first source of energy used by the body, with fats providing the best long-term source of energy," says Dr Jonny Bowden, nutritionist and author of *Living Low Carb*.

"Yet high levels of carbohydrate produce, for many people, higher levels than desirable of the hormone insulin, and fat cannot be burned or released to any significant degree in the presence of insulin. So for someone with a weight problem, high carb intake will provide all the fuel they need for living – and probably plenty for storage as fat in addition – and will raise insulin levels enough so that fat isn't released or burned."

So is it a simple matter of going low carb? Not quite.

There's a little more to ketosis than first meets the eye, the mouth or tummy.

What are ketones?

Simply put, ketones are water-soluble compounds that are a by-product of fatty acids produced by the liver for use as energy. Simple.

"Ketones are produced when the body converts fat into carbohydrates for energy production in the cells," explains weight loss expert Tim Altman. "So we are in ketosis when we are producing ketones or 'burning fat' – although this is a misnomer as we do not actually burn fat. We simply convert it to carbohydrate for energy production.

"You can be in varying levels of ketosis depending on how much fat you are converting to carbohydrate. It is a perfectly natural and common practice, and is quite healthy at lower levels."

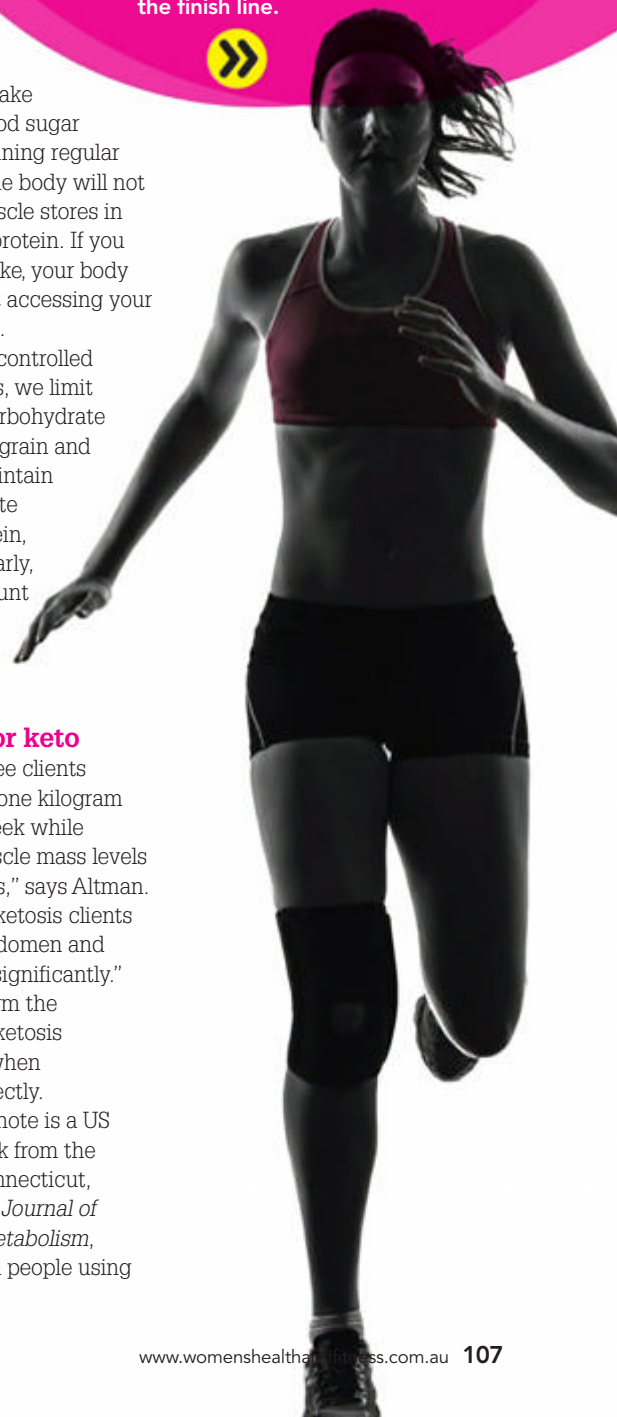
But what happens to ketones after they're produced?

"Most of these ketone bodies are sent to the tissues – including the heart and brain – to be used for energy, and some are excreted in the urine and breath," says Dr Bowden. "This is what the low-carb diets are talking about when they speak of changing from a sugar-burning metabolism to a fat-burning metabolism. Ketones are the by-product of fat breakdown."

How does ketosis work?

Okay, so we're aiming to reduce the body's reliance on carbs and go looking for those far too comfortable fat supplies, lounging around unsuspectingly. But how, exactly, do we get them off the couch and get them running round the energy-burning block?

"By controlling, or in most cases, reducing carbohydrate intake, the body will be forced to use fat and protein as fuel sources by converting them to carbohydrate," says Altman.



ketogenic diets with those employing a standard low-fat diet. The ketogenic group ate more total calories but lost more fat than the low-fat group.

"The stuff that goes on in between the calories coming in and the calories going out is much more important than the actual number of calories involved," says Dr Bowden.

Of course, you don't need to be in a state of ketosis in order to lose weight.

"You could be in ketosis and not lose weight, just as you could lose weight without being in ketosis," says Dr Bowden. "Many nutrition experts – myself included – feel that you don't have to be in ketosis to get the benefits of a low-carb diet. You can 'flirt' with ketosis, be on the cusp of ketosis, but unless you are very metabolically resistant, you may be able to get the benefits of low-carb eating without ever worrying about your ketone levels."

How to get started

A typical starting point for a ketogenic weight loss program includes up to three cups of carb foods a day, preferably in the form of vegetables (leafy greens, capsicum, mushrooms, cauliflower, broccoli, zucchini, green beans). Grains, bread and potato products get the flick; instead, include palm-sized portions of protein (the size and thickness of the palm of your hand) in the form of lean meat, fish, poultry, tofu, dairy or eggs. For every palm-and-a-half of protein consumed, add one palm of vegetable carbohydrates.

Omelettes, chicken or turkey breast salads, tuna and salmon and stir fries are the popular go-to ketogenic meal choices.

As you near your goal weight, you can gradually start to include – if you choose – small amounts of complex carbohydrates – brown rice, the

occasional slice of wholemeal bread and even a baked potato, from time to time as part of a maintenance diet. All refined carbs should be avoided at all costs. These are your true enemy.

Rookie mistakes

Even with the most focused intentions, there are plenty of ways to veer from the ketogenic path. We are, after all, humans – we invented temptation and made a fine art of keeping ourselves constantly distracted.

"Common pitfalls include not eating enough carbs in the form of vegetables," says Altman. "This is not a no-carb plan – it is lowered carbohydrates. Not getting enough carbs will make you hungry.

"Not having regular meals and snacks, which makes it impossible to regulate blood sugar levels, is also a common mistake. People think that skipping a meal or snack will reduce calorie intake and is therefore better. This is the wrong approach as it can make your blood sugar levels fluctuate, which will only put you back into fat storing mode.

"I never use the term 'calories' when using controlled ketosis programs. The most important thing is to reduce carbohydrate intake and regulate blood sugar levels."

Going low-carb isn't a ticket to go to town on the protein and fat. This approach will only sabotage all your good efforts.

"Eating too much protein is another common mistake," says Altman. "It can be stored as fat if the intake is too high. The same with eating too much fat – especially saturated or trans fats."

When keto crosses the line

More is not better when it comes to ketosis. Go too far and you actually go into

SUCCESS CHECK

How can you test if it's working?



How you know day to day whether you're in or out of ketosis?

By taking one of two different tests. The first, most readily available and most widely practised, involves the use of ketone test strips (also called Ketostix or ketone sticks), which are used to determine the presence of ketone bodies in the urine – a sign that your body is indeed burning fat for energy.

The plastic strips have a pad at the end containing a chemical that changes colour if ketones are present in the urine. There is usually a colour scale that displays the level of ketone bodies found, if any.

Ketone test strips can be purchased at most pharmacies, where they are usually kept with the diabetic supplies.

The other, more detailed test (which is not designed for ketones at all) is the bioimpedance or bioelectrical-impedance analysis (BIA). Undertaken with a health practitioner – check with your nutritionist or naturopath – the BIA is a non-invasive test that involves placing a couple of pads on the body (often on the hands and feet) which a mild electric current passes through.

"Bioimpedance analysis is a science that was

originally developed for use in monitoring patients after surgery," says Altman. "It accurately and reliably monitors body composition (fat and muscle levels) as well as hydration status, cellular energy production and even a figure for biological age.

"From the tests we can provide each client with a computerised report looking at individual health goals, specific lifestyle, dietary and supplemented recommendations and ongoing monitoring and progress."

Importantly for anyone practising ketosis, BIA tests reveal whether you are losing too much muscle (meaning you need to wind back the ketones) or gaining too much body fat (indicating that ketones are too low and that protein and/or carb consumption are likely to be too high).

"I focus on fat loss or fat-to-muscle ratio more than weight loss as it is a truer measure of progress than weight alone. The programs that see crazy amounts of weight loss very quickly often only work short term and usually involve loss of excessive amounts of muscle and water, which is counterproductive and unhealthy in the medium and longer terms."

unhealthy, even dangerous, territory.

"If ketone levels get too high for more than a few days, the body will detect this and perceive it is in a famine," says Altman. "Our body adapts to famine by dropping the basal metabolic rate, increasing insulin levels and hanging on to fat stores. What then happens is that your body will use protein predominantly for fuel and the by-product from this is ammonia, which is not healthy at all in high levels.

"The original limited carb eating plans failed because they didn't allow for this famine adaptation and, over time, people produced too much ammonia and suffered extreme rebound weight gain as the basal metabolic rate had dropped so low – particularly when they returned to their previous diet."

Part of the reason ketosis gets a bad name is that it often gets lumped together with ketoacidosis.

"For the better part of 30 years, mainstream medicine, dietitians, and most of the critics of the low-carb diet have completely confused two conditions," says Dr Bowden.

"One of those conditions is ordinary, benign, dietary ketosis. The other is a life-threatening condition called



OMELETTES, CHICKEN OR TURKEY BREAST SALADS, TUNA AND SALMON AND STIR FRYS ARE THE POPULAR GO-TO KETOGENIC MEAL CHOICES.

diabetic ketoacidosis."

Diabetic ketoacidosis can occur with untreated type 1 diabetes, where blood sugar levels rise and an abundance of ketone bodies are produced at the same time.

The body always prefers to utilise the glucose (sugar) as fuel and without insulin production, fat is also released into the

bloodstream faster than it can be used and ketone bodies are manufactured en masse.

"The person without uncontrolled type 1 diabetes has a number of normal feedback mechanisms that will always keep the ketones in a safe range, mechanisms that do not exist with the untreated type 1 diabetic," says Dr Bowden.

Other groups of people who shouldn't attempt a ketogenic diet include pregnant or nursing women (to date we don't know for certain the effect ketosis may have on the baby) and people with kidney disease.

"If you are not in one of the three groups, the ketogenic diet is perfectly and utterly safe," says Dr Bowden.

The only other real drawback for people practising a moderate ketogenic diet is that it can cause occasional light-headedness and headaches at the start and an unpleasant and unavoidable 'fruity' breath as a result of acetone, one of the ketone bodies. ■

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Clean freak



Eating clean's not as simple as it sounds. Even whole foods can harbor things you'd rather not consume.

Words: Stephanie Osfield



The whole clean eating thing opens a can of worms, since no-one really knows quite what it means. But for the sake of common understanding, let's go with this definition: whole foods worked back with minimally processed foods (in greater or lesser proportions, depending on how hardcore you want to get).

What isn't apparent in wholesome images of figs styled on cream cheese against a high thread count striped tea towel – a-hem Instagram – is that even whole foods can carry additives to lengthen shelf life, maximise convenience and reduce food poisoning risk. Here's the Inspector Gadget guide to grocery shopping.

Meat

To stop the growth of micro-organisms, meats that are vacuum packed are often blasted with chemicals like carbon dioxide, nitrogen and even carbon monoxide. Some, like carbon monoxide, evade the rigour of labelling laws as they're classified 'processing aids'. You'd have no way of knowing. "This allows lamb cutlets to be stored for up to 112 days and chilled beef mince for up to 44 days," says Tom Godfrey, spokesperson for consumer watchdog organisation Choice. Deli lunch meats are a Pandora's box, harbouring strategically placed viruses to fight listeria pathogens. Like carbon monoxide, they fly under the radar as Food Standards Australia New Zealand deems these bacteriophages safe.

DODGE IT: Buy your meat from a good local butcher and grill them on which chemicals and colours they use on your cut of choice.

Fruit and Veg

On the surface, it doesn't make a whole lot of sense, but you may ingest fewer additives buying your freg in the canned and freezer aisles than fresh produce. So-called 'fresh' fruit and veg can have added chlorine (certain salad pack lettuce), sulphur dioxide (it prevents mould on grapes and berries). Tropical fruits can cop a dose of gamma radiation. Then there are apples, melons and avocados, which are often doused with 1-methylcyclopropene to slow

deterioration (a treated apple can be stored for six to nine months).

DODGE IT: Buy organic or, to minimise exposure to 1-MCP, buy apples in season. Keep your melon and avocado intake low in winter, when they're either going to be artificially preserved or imported. Frozen and canned veg can be more nutritious than fresh according to Godfrey. They are canned or packaged fresh, when nutrition is at its highest.

Cereals

There's a degree of creative licence in the term 'breakfast cereal'. What goes in the bowl is often a shadow of its former whole grain self after undergoing a process known as extrusion. Basically it means the raw ingredients are forced through a small hole at high temperature. Worse, the flakes have often been sprayed with coatings of oil mixed with honey or sugar to impart and maintain crunch. While some vitamins are often added back in, they no longer have the merits of nutrients in their native environment.

DODGE IT: DIY cereal with brown rice or quinoa cooked the night before. Whole traditional oats also have a lower glycaemic index than most processed cereals and instant oats, which have reduced particle size from pre cooking.

Bread

Never mind whether it contains extra fibre or will knock you out of ketosis – supermarket bread can be par baked (which essentially means they half cooked it halfway across the world months earlier). Coles famously faced the Federal Court on charges of par baking some of their bread. Care factor? If the factories doing the first part of the baking leave bread sitting for too long in the 'danger' temperature zone, bacteria can start to grow before the product is vacuum sealed. That is, it's blast frozen with the bacteria in it, then shipped and thawed and sold, says Nutrition Australia senior nutritionist Aloysa Hourigan.

DODGE IT: Check the label for a declaration that the bread was made overseas. 'Packaged in Australia' can also mean the baking was done offshore.

Flavours

There are thousands of different synthetic flavours, which may each contain a range of ingredients with long chemical names. "Companies are very secretive about the blend of flavours they use in foods and exactly how those flavours have been made," says nutritionist Catherine Saxelby, founder of website Foodwatch. Vanillin, derived from wood pulp, is used in some chocolate spreads and soft drinks. Vanilla and raspberry additives in ice cream and fruit-flavoured products can contain castoreum – from the sac scent gland of a beaver, which is right near its bottom.

DODGE IT: Try to choose foods where all the ingredients are listed so you know exactly what you're eating. Also clue up on what various 'nicknames' mean.

Permeate residency

You've probably heard the hyperbole about permeate in milk, but it turns out 'permeate free' is less cause for alarm than clever marketing ploy. The arguments for dodging permeate are flimsy. It basically means that companies separate streams of the milk and recombine them to keep protein and fat levels consistent despite seasonal and lactation cycle-based changes in cows according to nutritionist Catherine Saxelby. "But there are no actual proven health problems due to permeate in milk."

Additives

The good news is that Food Standards Australia New Zealand (FSANZ) mandates declaration of food additives on labels by category (e.g. colour) appended with the name agreed upon under the standards or code number in brackets. While FSANZ's stamp of approval attests that ingredients have been deemed safe for human consumption, there are some you might want to check more closely.

AMMONIUM SULFATE

This chemical, also used as a fire retardant, is used to help improve the health of yeast used for wine and beer fermentations. If you're not so keen on it, you might consider brewing your own or getting organic vino.

TITANIUM DIOXIDE: Used to whiten foods such as mayo and ice cream, it's used in some paints.

ANTI-CAKING AGENT

Improves flow characteristics and inhibits sticking. "They are often silicone or aluminium based," says Saxelby. "However, the aluminium link to dementia has now apparently been disproven, so it is no longer considered a health concern."

GELATIN

Vegos and vegans, beware packaged desserts, custards and jellies. The gelatin used by most food manufacturers comes from beef.

CARMINE

Yes, eating insects is all the rage, but not when all you wanted was a flavoured milk. Derived from the extraction of cochineal (dried bodies of insects), carmine lends a lovely red or pink colour to confectionery, flavoured milk, cake mix, ice cream, yoghurt, dairy desserts and even some savoury sauces. Yum.

SHELLAC

Used to make apples shine and give lollies a tantalising lustre, shellac is extracted from lac, a secretion from insects, and used to shine furniture. Shellac can also lurk on salad leaves (it increases longevity) and on anything that looks gloriously glossy (it's a glazing agent). Finally, foods prone to moisture loss may get a spritz to retard dehydration – it's a humectant and emulsifier. Original purpose? Anti-freeze in planes and boats. It is considered safe below a certain threshold by FSANZ.

Sticky claims

The era of discriminating food shopping has fertilised conditions for fearmongering appeals that bypass common sense (and budgeting nous). Take these with a grain of salt.

97% FAT-FREE

Look out for lollies, biscuits and chips bearing this badge. Fat is only one part of the macronutrient picture. They can still pack a punch in the fat, kilojoule, salt, sugar and colour stakes.

NATURAL OILS

Palm and coconut oil may come from natural sources but they are high in saturated fat, while vegetable oils are not healthy if they have been hydrogenated (turning them into a trans fatty acid, which clogs the arteries).

MULTI-GRAIN

This can indicate a white low-fibre food with a few grains sprinkled through. Look for wholemeal varieties instead.

LITE

Not necessarily lower in fat or calories, 'lite' foods can be lighter in flavour, colour or taste. Some are higher in calories than the original!

Pretty pictures A ripe mango or capsicum on the label doesn't mean it's healthy; it may only make up five per cent of the flavour.

NO ADDED SUGAR

Sweeteners come in many non-sugar forms, which all elevate insulin levels. Watch out for dextrose, fructose, glucose, maltodextrin and corn syrup (which has been linked to diabetes in studies). Sugar-free foods may also have more kilojoules because they contain more fat.

Storm in a meat cup

The image of a chicken breast shot up with antibiotics has made its way into cultural lore, but when it comes to things you should be scared of eating, poultry doesn't rate highly according to microbiologist and food safety specialist Ian Jenson from Meat & Livestock Australia. "Antibiotic residues in meat will be rare and at very low levels that are well below the level that has any observable effect," says Jenson. He does concede that it's not uncommon for a whole herd or flock to be medicated when one animal shows signs of disease, but says a mandatory waiting period between antibiotic use and slaughter safeguards consumers. "After animals have been treated with an antibiotic, they are not processed for food until the antibiotic has reached acceptably low levels in meat."

PALM OIL

Palm oil is the most consumed edible oil in the world according to consumer organisation Choice. In 2009, it represented a third of the world's total oil production – against olive oil's two per cent. An edible vegetable oil derived from the fruit of oil palms, it contains 50 per cent oil according to accredited practising dietitian Charlene Grosse, from the Dietitians Association of Australia (DAA). "You get more oil out of one palm fruit than you would from many handfuls of olives." In other words, it's cheap. Which explains why it's a staple in processed foods such as biscuits, cakes and pastries.

RISK FACTOR

From a metabolic point of view, nutritionist Dr Paul Lewandowski says palm oil is much like other oils providing energy and "incorporated into cell structures such as cell membranes". Lewandowski warns that for some people, the oil's impact on cell membranes promotes adverse health effects. Semi-solid at room temperature, 'palmitic acid' does not contain cholesterol, says Dr Lewandowski. However, saturated fat intake increases both LDL (bad) and HDL (good) cholesterol, he says. "Palm oil is high in saturated fat and low in polyunsaturated fat," Grosse says.



HOW TO SPOT IT

Estimates by the World Wildlife Fund put the proportion of Aussie supermarket

products – from chips and chocolate to shampoo – containing palm oil at 50 per cent. The Australian Food and Grocery Council says it's closer to 80 per cent. But don't expect to see it in the ingredients list. FSANZ regulations gloss over palm oil, which is allowed to parade on labels as vegetable oil. The sleuth solution? If a label lists vegetable oil, look at the saturated fat count and scan the other ingredients. If there are no sources of animal fat listed (think butter) and the label lists satch fat, there's a fair chance the product contains either palm kernel oil, palm oil or coconut oil. (Other vegie oils are unsaturated.)

MSG

Synonymous with old-school Chinese takeaway joints and food court noodles, monosodium glutamate (MSG) is chiefly used as a flavour enhancer – in rice crackers, instant noodles and myriad other packaged snacks. According to Dr Lewandowski, the salt of glutamic acid is one of the most abundant naturally occurring non-essential amino acids. Unlike glutamic acids found naturally in foods, MSG is the end result of an extraction process whereby the amino acids are bound to salt in order to isolate and crystallise them.

RISK FACTOR

Whether or not MSG lives up to its notoriety is debatable according to Dr Lewandowski.

MONOSODIUM GLUTAMATE (MSG) IS CHIEFLY USED AS A FLAVOUR ENHANCER – IN RICE CRACKERS, INSTANT NOODLES AND MYRIAD OTHER PACKAGED SNACKS.



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He says there "is no scientific evidence that MSG has negative health effects on 99 per cent of the population".

Still, a 2008 University of North Carolina study published in the journal *Obesity* suggests that MSG consumption in remote Chinese villages coincided with significantly increased incidence of overweight.

Grosse and Dr Lewandowski agree that MSG's less brutal than hype suggests. Because humans have the ability to metabolise glutamate (both in its natural form or as an additive), MSG has very low acute toxicity. "The oral lethal dose to 50 percent of animal subjects (LD50) is five times greater than the (LD50) in salt," Dr Lewandowski says. "The intake of MSG as a food additive and the natural level of glutamic acid in foods do not represent a toxicological concern in humans." However, studies suggest that some people are sensitive to MSG, with estimates varying from two to 36 per cent. Reported symptoms include headaches, excessive thirst and itchy skin.

HOW TO SPOT IT

Australian food manufacturers are required to list the additive in their ingredients, so check the label for MSG (additive code 621). It's not just MSG, though. Flavour enhancers 627, 631 and 635 commonly hint at the presence of MSG, since they enhance its flavour impact.

SODIUM NITRATE AND SODIUM NITRITE

Low in fat, high in protein and easy to stash in the tearoom fridge: what's not to love about packaged sambo meat? Try sodium nitrate and nitrite, which extend the shelf life of packed deli meats and poultry. It's the same chemical used to prevent botulism, Dr Lewandowski says.

The real concern is how it behaves when it mixes with your blood's haemoglobin (Hb), Grosse says. It forms methaemoglobin (MetHb), which in high levels has been associated with clinical indications. In a survey of 52 foods funded by FSANZ, processed meats accounted for less than 10 per cent of dietary exposure to nitrites, which are more commonly found in vegies (42 per cent to 78 per cent) and fruits and fruit juices (20 to 38 per cent).

RISK FACTOR

Dr Lewandowski says the metabolites are potentially harmful. Studies have shown a link between increased levels of nitrates and increased deaths from certain diseases including Alzheimer's, diabetes mellitus and Parkinson's, "possibly through the damaging effect of nitrosamines on DNA", he says.

In a 2010 study published in an online publication of the American Cancer Society, *Cancer*, researchers found that patients who consumed diets high in dietary nitrite and additional nitrite from cured meats had a 29 per cent increased risk of being diagnosed with bladder cancer.

To be toxic, however, you'd need to eat around 3,236 mg per kilo

(toxicity for plain old sodium kicks in at 71 mg, so you can see how miniscule the risk is deemed to be). They also have a short half-life, meaning they leave the body quickly.

HOW TO SPOT IT

It's not easy to dodge these additives; according to nutrition agitator Chris Kresser (chriskresser.com), even purported nitrate- and nitrate-free products can contain natural sources. 'Natural preservatives' may even up the nitrate/nitrite quotient. Dr Lewandowski suggests choosing foods with vitamins C and E, which are antioxidants that may mitigate the impact.

THE REAL CONCERN IS NOT WHAT IT DOES ON ITS OWN, BUT HOW IT BEHAVES WHEN IT MIXES WITH YOUR BLOOD'S HAEMOGLOBIN



PARTIALLY HYDROGENATED OILS

Trans fats are the subject of continued global debate by health policymakers, and you won't find a heap of them in Australia. But partially hydrogenated oils are a similar beast, and abundant on the shelves. They're derived from a process whereby a vegetable oil is heated and under pressure to turn them from a liquid into a solid or semi-solid, according to Dr Lewandowski. You'll find them in generic margarine-style spreads and many commercial baked goods.

RISK FACTOR

Dr Lewandowski says 'yes'. "The problem with partially hydrogenated oils is that

they are similar to trans fat in that they have been linked to the development of cardiovascular disease," he says. "A general rule of thumb with partially hydrogenated oils is to consume them infrequently." According to Grosse: "Trans fat elevates cholesterol levels in the same way as saturated fat; trans fats are mainly found in food prepared with partially hydrogenated oil." While he says the two are not identical, Dr Lewandowski says partially hydrogenated oils and trans fatty acids behave in eerily similar ways. A 1993 Harvard study concluded that the intake of partially hydrogenated oils contributed

to the risk of a heart attack. Researchers estimated that replacing just two per cent of energy from trans fat formed by partially hydrogenated vegetable oils with healthy unsaturated fat would decrease the risk of coronary heart disease by about one third.

HOW TO SPOT IT

There is currently no mandatory labelling for trans fat in Australia, but the Heart Foundation tick guarantees that there's no more than one per cent trans fat in the total fat count of spreads. Look out for hydrogenated oils and partially hydrogenated vegetable oils. ■

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FOOD YOU CAN USE

Food's got a lot on its plate. No longer obliged to merely fuel the body's basic functions, it's become a pawn in a game of one-upmanship against a collective mentality that more is more. More energy. More happiness. More focus. While food as medicine earned its status as a bona fide strand of dietetics with Hippocrates' famous proclamation – Let food be thy medicine and medicine be thy food – contemporary science plates up myriad ways to manipulate vigour, mood and productivity with tactical meal plans.

"There is an increasing amount of research pointing towards food as having a powerful effect on the way we feel, both physically and emotionally," says Alexandra Massey, author of *Super Foods to Boost Your Mood*.

Tailoring your grub to your goals can harvest tangible advantages in the feelgood stakes. Conversely, a diet incongruent with the body's needs at a given time – think PMS or that 70-hour week – can exacerbate PMT, amplify the deleterious effects of fatigue and cripple the immune system. Hello deadline cold sore.

While the interplay of micronutrients, trace minerals, macronutrients and the body's delicately balanced ecosystem is more intricate than a salted toffee net, there are simple shortcuts (a bit like refining your Net-A-Porter search for tops to only include neon yellow tanks).

The first refinement tier honours neurotransmitters, whose balance is integral to emotional stability, energy and focus. The big three are serotonin (the antidepressant hero), dopamine (involved in focus and reward) and noradrenaline, which is a bit like caffeine.


"Their function is to send messages from one nerve cell to another within the brain and they influence thought, functions and feelings," says Massey. "These

MOOD PANTRY

[Pick one from each]


TRYPTOPHAN

Turkey, beef, pork, cheese, chicken and, if you can get it, wild game.




LOW-GI CARBS

Wholegrain breads, pasta and rice.



FATS

Oily fish (salmon/tuna/sardines), flaxseed oil, butter, coconut cream.



CAN IT

Refined breakfast cereals, rice crackers and fruit juice; caffeine, which depletes mood-integral nutrients. Artificial flavours, colourings and chemical additives in processed food. Aspartame (a.k.a. NutraSweet), which contains amino acid phenylalanine, which competes with tryptophan and serotonin. Fasting is off the menu.



“**WITHOUT PROTEIN YOU CANNOT FEEL OPTIMISTIC, ENTHUSIASTIC, CALM, OR COMFORTED**”

chemicals are made in the brain from the food we eat and are highly sensitive to the type of foods that are eaten.”

Step two is singling out the amino acid precursors to respective neurotransmitters. There are 22 amino acids, some of which can be made by the body (non-essential) and some of which must be derived from food (essential). Serotonin production, for instance, requires adequate tryptophan (essential). Dopamine and noradrenaline are knock-ons from phenylalanine and its domino buddy tyrosine. While amino acids are sold in supplement form – primarily

as fitness aids – they are the building blocks of protein, which is where the nosh factor figures.

“Without protein you cannot feel optimistic, enthusiastic, calm, or comforted,” says nutrition psychology expert Julia Ross, author of *The Mood Cure*. She recommends eating 20 to 30 grams of protein per meal – that’s a palm-size portion of protein three times a day.

Tryptophan first converts into a substance called 5-HTP, which then converts directly into serotonin, says Ross. “The reason that serotonin is so emotionally vital is that it is our primary defence against

both depression and anxiety. Serotonin deficiency is a factor in many seemingly unrelated psychological and physical symptoms, ranging from panic and irritability to insomnia, PMS, and muscle pain.

The kicker – caveat low-carber – is that tryptophan can only be used to synthesise serotonin if you’re eating adequate carbs, which clear a path to let tryptophan across the blood brain barrier. Low-carb diets have been linked to depression in multiple studies. Although the wrong type of carbs – simple carbs – can be counterproductive.

"One of the quickest ways to send your mind and mood reeling is to eat fast-release carbohydrates like sugary drinks and snacks and white bread," says Dale Pinnock, nutritionist and author of *The Medicinal Chef*.

"These foods cause a sugar rush and a surge of adrenaline that can make us feel manic and edgy. Adrenaline is to anxiety what petrol is to a bonfire. On top of that, the body has to deal with this sugar at a rapid pace, and what goes up must come

down, so we are left in a slump. This causes low moods and mental fog."

Successful production of serotonin from tryptophan also relies on sufficient calcium, magnesium, vitamin D, B vitamins and essential fats, which lubricate the brain.

"Every time you consume Omega-3, your brain gets first dibs, because no other fats can do as good a job," says Ross. "The 'other' omega-6 fats may be your brain's worst problem and the cause of some of

your worst moods. The rate of depression among individuals correlates precisely with the ratio of omega-3 fats to omega-6 fats in the brain. The more omega-3, the better your mood; the more omega-6, the worse the mood.

"If we add more omega-3, we can quickly raise a potent natural antidepressant brain chemical called dopamine by 40 per cent. That translates to mental and physical alertness, focus and excitement."

Omega-3s – containing

fatty chains called DHA and EPA – can be found in oily fish and flaxseed oil. Omega-6s in margarine and vegetable oils.

To optimise the effects of tactical nutrient composition, also avoid dieting. "The short-term nutrient losses sustained in a diet can easily add up to long-term mood deficits. Dieting, fasting, restricting – all have indelible effects on your brain. There is no such thing as a 'successful' low-calorie diet. Dieting starves and literally shrinks your brain," Ross warns.

FORMAL FUNCTION

THE GOAL: STRESS REDUCTION THE BRIEF:

Stress sends the body's production of stress hormone cortisol into hyperdrive. Not only does that augur badly for belly fat, it can inhibit clear thinking – think

needless mistakes. Try camomile or lavender tea. Nutritionist Dr Rebecca Harwin also suggests increasing your intake of foods rich in vitamin B, Omega-3s and magnesium in the days preceding a stress fest – think sunflower seeds, nuts and fish, which will help to improve brain function. To offset the scatterbrain effect of too-much-to-do syndrome, prioritise quality fuel, says nutritionist Zoe Bingley-Pullin. She recommends starting with a small portion of complex carbohydrates

to help give your body a steady stream of sugar for the day. "For breakfast, try some yoghurt with low fat muesli with some blueberries or strawberries." For lunch, go a sandwich on brown or wholegrain bread with plenty of leafy greens and lean protein. For the rest of the day, Dr Harwin emphasises the importance of eating regularly. She also warns against vices such as coffee and cola, which are stimulants and can mimic or amplify anxiety symptoms. To stay mentally focused, it's critical to maintain stable blood sugar levels as the brain's preferred fuel source is glucose. Naturopath Dannielle Newham recommends starting a stressful day with breakfast containing berries, fruit and yoghurt, with a quarter cup of low-fat muesli to sustain energy. Snack on dried fruit, apples or bananas and avoid going hours without eating. Dr Harwin says sitting for prolonged periods changes blood sugars and can promote hunger and cravings for simple carbs. "This can further result in an energy crash." And so it goes on.



Caitlin Reid is an accredited practising dietitian (APD) and exercise physiologist at Health & The City. For healthy recipe inspiration, visit themainmeal.com.au



THE GOAL: FOCUS

THE BRIEF: Eat regularly and favour low-GI meals, balanced with adequate fibre, protein and fats for steady blood sugar release and prolonged satiety. (Nothing like that niggling hunger to knock you out of 'the zone'.) Eat a nutritious lunch complete with lean protein and low-GI carbohydrates – think wholegrain sandwich or wrap with grilled chicken breast or turkey and vegies or brown rice prawn hand rolls – and avoid caffeinated soft drinks and lollies. Sure, your noggin needs glucose, but get it in the form of a wholegrain wrap with roast beef, avocado, reduced-fat cheese and baby spinach. Pair with a piece of fruit.

THE GOAL: ENERGY/VITALITY

THE BRIEF: Ensure you're getting adequate iron by including three to four serves of red meat such as beef or lamb each week. Pair iron-rich foods with vitamin C to boost absorption. Women of childbearing years need more than twice the amount of iron compared to men. Iron from animal foods (haem iron) is absorbed more efficiently in the body than iron from plant-based foods (non-haem iron), so it's important to include adequate amounts of iron-rich animal products. Vegetarian? When paired with iron-rich plant-based foods such as legumes, nuts and dark leafy green veg, vitamin C-rich foods such as berries, citrus fruits, tomato and broccoli increase iron absorption. Try a stir-fry containing beef, broccoli and capsicum with brown rice. To optimise iron stores, ditch tea, coffee and red wine with

meals; tea and coffee contain polyphenols that bind to iron and inhibit its absorption. According to dietitian Sally-Anne Livock, flagging energy is often the result of ill-informed food choices; skipping breakfast and overdoing it at dinner and dessert undermine the fuelling aspect of eating. Worse, late eaters often compensate for the top-heavy meal plan by going for hours minus food during the day. When you run short of fuel, you will feel fatigued – not rocket science. To shore up stable energy, mandate mid-meal snacks and always include a small amount of low-GI carbs with meals, Livock says. "Regularly refuel with small regular meals and small mid-meal snacks," she says. For an afternoon energy hit, eschew chocolate bars for low-fat yoghurt and raw fruit, 10 raw almonds, or a home-made low-fat smoothie.

THE GOAL: SLEEP

THE BRIEF: Wind back evening eating, which means amping up your intake earlier in the day. If you don't eat brekkie, coax your body into an AM rhythm with smoothies before working up to wholegrain toast with smashed avocado or home made muesli with yoghurt and berries. When habit tells you to grab a handful of M&Ms to nibble

on the couch, refocus on your goal of sleeping through the night; while you mightn't be aware of it, blood sugar will drop while you're in the land of nod, disrupting sleep.

To reduce hunger and appetite at night, eat a breakfast comprising a quarter to a third of your daily energy needs (up to 2,000 kJ). Try a smoothie made with berries, skim milk, yoghurt and LSA. Reduce

evening hunger with a small snack at 3pm and avoid caffeine after lunch – it stays in your body and hijacks adenosine receptors, so the tired fairy can't tell your brain it's stuffed. If you need it, have a small nightcap of complex carbs an hour before bed to promote calm. A piece of wholegrain toast with vegemite, for instance. Otherwise try a glass of skim milk. ■



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Nut case

NUT: *Almonds*

CASE: 50 g has as much calcium as half a glass of milk

Almonds are the desk snack du jour. Here's why. A 50 g serve of almonds contains as much calcium as half a glass of milk and supplies about 130 per cent of daily vitamin E requirements (more vit E than any other nut). What's more, their betasitosterol can block the absorption of cholesterol.

NUT: *Brazil nuts*

CASE: Just two nuts contains your RDI of antioxidant selenium

Forget that they're 62 per cent fat (but remember most of it is polyunsaturated) – just two of these pearlers will meet your RDI for selenium, an antioxidant depleted in many soils. Magnesium and calcium are also in the mix.

NUT: *Cashews*

CASE: The most iron and zinc you'll find in a plant source. Cashews, which make a gorgeous vegan cheese, are also a great source of folate.

NUT: *Chestnuts*

CASE: Low kilojoules, high fibre

The low-kilojoule wild card in the nut camp (try 214 kJ for 30 g), these floury morsels are chockers with fibre and gluten free. While they're staples of mountain roadsides in winter, chestnuts come frozen year round.

NUT: *Coconuts*

CASE: Potassium to replace electrolytes after working out

Sure is (a nut), but not quite as nutritionally virtuous as its miniature cousins. Instead, coconut comes into its own in the sporting arena, with coconut water being added to fitness supplements and electrolyte replacement drinks.

NUT: *Hazelnuts*

CASE: Low fat and packed with B vitamins

Want to save a few grams of fat (even though they're goodies)? Hit up a hazelnut, with just 36 per cent fat. The anchors of Nutella also ferry vitamins E and B6, thiamine, niacin, folic acid and calcium.

NUT: *Macadamias*

CASE: No cholesterol

They may be 70 per cent fat, but 80 per cent of it is monounsaturated (good), and they've got zero cholesterol.

NUT: *Peanuts*

CASE: 25 per cent protein

The game's up: peanuts aren't nuts – they're legumes. They therefore rival beans and peas in the protein stakes, comprising almost a quarter protein. They are 49 per cent fat, which isn't bad for a nut, and deliver bonus fibre and calcium.

NUT: *Pecans*

CASE: Plant source of alpha linolenic acid for omega-3s

Few plant sources can claim this, so it's worth taking notice of pecans' ALA. It might aid blood flow and heart health (and anyway, the 'can makes a smackin' pie filling).

NUT: *Pistachios*

CASE: Cholesterol combatant
extraordinaires pistachios provide plant sterols that can block cholesterol absorption. They're also among the best nuts for potassium and protein, and vitamin A precursor beta-carotene.

NUT: *Walnuts*

CASE: Omega-3s

Like pecans, walnuts boast alpha linolenic acid, which can keep blood flowing freely and assist with maintaining heart health as well as facilitating brain function. You know what they say about foods that look like brains...

Portion Control

One serve of mixed nuts (50 g) supplies 5 g protein, 30 g fat, 3 g fibre and 1,040 kJ. Nut varieties vary slightly in their nutritional profiles; for example:

50G WALNUTS

5 g protein, 27 g fat, 3 g fibre, 1,040 kJ

50G MACADAMIAS

3 g protein, 38 g fat, 5 g fibre and 1,050 kJ

50G OF PEANUTS

12 g protein, 25 g fat, 3 g fibre, 590 kJ

Hint:

A 30 g serve of almonds is about 20 nuts.

Shopping Guide

LOOK FOR



1. NUTS IN THE SHELL – choose clean nuts free from cracks and holes. They should be heavy for their size, indicating a fresh, meaty kernel
2. NUT KERNELS – choose crisp, plump and meaty kernels indicating high quality
3. ONCE HOME, remove nuts from plastic bags and store in an airtight container in the fridge or freezer. Nuts can be refrigerated for up to four months and frozen for up to six





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Cereal gain

In the era of paleo and carb prejudice, grain based breakfasts are losing ground to bacon and eggs. But unlike sugary processed cereals, bespoke brekkie cereals using nouveau grains, nuts and fruit cater to all diet types.

A AMARANTH: It's gluten free, vitamin rich and high in protein and fibre. Amaranth also contains more lysine (an amino acid that's good at building muscle) than any other grain. When cooked it has a porridge-like texture, but you can also get puffed amaranth that doesn't require cooking.

B BUCKWHEAT: It's a high-protein and gluten-free grain loved for its nutty flavour. Buckwheat also contains higher levels of zinc and manganese than most other grains and is a good source of carbohydrates. Buckwheat flour is a common ingredient in gluten-free recipes, but buckwheat groats can be used to add crunch to any dish.

O OATS: Oats are higher in protein and fat than most other grains and contain loads of B-group vitamins as well as iron, zinc and potassium. They're also naturally rich in beta-glucan, a soluble fibre found to improve blood glucose and insulin response. We've all had microwave porridge before, but oat groats (dried oat seeds) can also be used to make less processed, nuttier porridges.

Q QUINOA: It's probably the most beloved grain of the moment. Quinoa is a high-protein and gluten-free grain that is rich in low-GI carbohydrates. It's also packed with vitamin E and B-group vitamins and contains a high level of essential amino acids (including lysine). Quinoa grains can be cooked like rice and quinoa flakes can be used as an alternative to oats in almost any recipe.

C CHIA: This seriously trendy super seed develops a unique gel-like coating when it absorbs moisture, able to take on almost eight times its weight in water! (According to Amy Ruth Finegold in *Super Grains and Seeds*). They also have a high omega-3 content.

H HEMP SEEDS: Have a similar omega-3 levels to Chia seeds but are higher in fibre and have an earthy (sometimes bitter) flavour.

S SUNFLOWER SEEDS: Sunflower seeds are chockers with good fats and high in fibre and B vitamins. They can be eaten toasted or raw as a snack or added to anything for a nutritional boost and some extra crunch.



BLUEBERRY HEMP SEED GRANOLA

SERVES 10

WHAT YOU'LL NEED

- 150 g (1 ½ cups) gluten-free rolled (porridge) oats or rolled buckwheat
- 10 g (¼ cup) puffed amaranth
- 30 g (¼ cup) chia seeds
- 25 g chopped almonds
- 30 g (¼ cup) sunflower seeds
- 30 g (¼ cup) hemp seeds
- 30 g (¼ cup) flaked brown rice
- 20 g (¼ cup) flaked coconut
- ½ tsp cinnamon
- 125 ml (½ cup) coconut oil
- 125 ml (½ cup) coconut nectar* or rice malt syrup*
- 55g (½ cup) dried blueberries

WHAT YOU'LL DO

Preheat the oven to 180°C (350°F) and line a baking tray with baking paper.

Place all the dry ingredients, except the dried blueberries, in a large mixing bowl and combine. Then place the coconut oil and coconut nectar in a separate bowl. Heat over a double boiler or in a microwave for about 30 seconds until just melted. Pour the liquid over the dry ingredients and mix until everything is well combined.

Spread the mixture evenly across the lined baking tray and bake for 10 minutes. Stir the ingredients around on the tray, and cook for another five to 10 minutes until golden.

Remove from the oven, evenly sprinkle the dried blueberries on top and then let the granola cool completely on the tray.

This granola will store in an airtight container or jar for up to two weeks

Recipes and images from Kenkó Kitchen by Kate Bradley, published by Hardie Grant Books RRP \$39.95, available in stores nationally.



CHAI CHIA BREAKFAST PUDDING

SERVES 4

WHAT YOU'LL NEED

- ¼ teaspoon Celtic sea salt
- 40 g (¼ cup) hazelnuts
- 120 g (¾ cup) raw cashews
- ½ tsp alcohol-free vanilla extract
- 6 drops stevia liquid, or 2 tbsp sweetener of your choice (such as xylitol or rice malt syrup)
- ½ tsp cardamom
- ½ tsp nutmeg
- ½ tsp ground cinnamon
- 30 g (¼ cup) chia seeds
- ½ cup chopped nuts, to serve
- Strawberries, to serve (optional)
- Almond milk, to serve

WHAT YOU'LL DO

Combine the salt, hazelnuts, cashews, vanilla, stevia and spices with three cups of filtered water in a blender and whizz until smooth. Transfer to a bowl and add the chia seeds. Stir to combine well, then cover and place in the fridge overnight. To serve, scatter with chopped nuts and strawberries, if using, and add almond milk.

Recipe and image from Supercharged Food, Eat Clean Green and Vegetarian by Lee Holmes, published by Murdoch Books \$35.00



GLUTEN-FREE CHOCOLATE LACUMA GRANOLA

SERVES UP TO 10

WHAT YOU'LL NEED

- 450 g buckwheat, soaked overnight in water
- ¼ cup cacao powder
- ¼ cup coconut nectar (or 6 tbsp 100% pure maple syrup)
- ¼ cup lucuma powder
- ⅓ cup goji berries (or ⅓ cup raisins)
- ⅓ cup cacao nibs (or ⅓ cup crushed almonds)
- ¼ tsp coarse sea salt
- 1 tsp cinnamon
- ¼ cup water

WHAT YOU'LL DO

Rinse your soaked buckwheat very well, as it produces a slimy coating after being soaked in water for a period of time. Then combine all ingredients in a big mixing bowl. Get your hands in there and get everything well coated. Spread the mix onto dehydrator sheets and dehydrate overnight at 115°F (45°C), or if you don't have a dehydrator, spread onto a baking tray and bake in the oven on a very low heat or

until the buckwheat dries out and gets a little crunchy. Serve with your favourite nut milk.

Recipe and image from the Raw Desserts app by Lauren Glucina (Ascension Kitchen). \$4.99 on the App Store and Google Play, visit rawdessertsapp.com



HEARTY OAT GROAT CEREAL WITH ACAI PURÉE

SERVES 2

WHAT YOU'LL NEED

Oat Cereal:

- 190 g oat groats
- 720 ml water
- 2 tbsp almond milk
- Maple syrup, to taste

Acai Purée :

- 100 g frozen acai purée
- 1 small banana, frozen
- 180 ml almond milk
- 1 tsp maple syrup
- Fresh fruit, to garnish

WHAT YOU'LL DO

Oat groats need to be soaked in water in a medium saucepan or pot the night before. In the morning, bring the soaked oats to a boil, then cook on a low boil with the lid off for 30 minutes. The water will evaporate to create a mushy, rice-like consistency. Scoop the mix into two bowls. Add the almond milk and maple syrup into each and stir.

Put all of the ingredients for the acai purée in a food processor and blend until you have a thick and silky consistency. Then pour acai purée on top of the oats, covering them completely, and garnish with fresh fruit. Raspberries, blackberries and cherries work particularly well. Serve immediately.



Recipe and image from *Super Grains and Seeds* by Amy Ruth Finegold, published by Ryland Peters and Small, \$39.95



OVERNIGHT PORRIDGE THREE WAYS

Vanilla Oat Porridge

SERVES 1

WHAT YOU'LL NEED

- 35 g (½ cup) rolled gluten-free (porridge) oats or rolled buckwheat
- 125 ml (½ cup) soy milk or almond milk
- 125 g (½ cup) coconut yoghurt
- 1 tsp stevia
- 1 tsp rice malt syrup or raw honey
- ¼ tsp vanilla powder or 1 tsp vanilla extract

Vanilla-stewed pear:

- 1 honey pear or brown pear
- ½ tsp stevia
- ¼ tsp vanilla powder or ½ tsp vanilla extract
- 1 tbsp coconut nectar or rice malt syrup
- 60 ml (¼ cup) water

WHAT YOU'LL DO

For the vanilla-stewed pear, cut the pear up into nice chunky slices, then put it in a small saucepan. Add the remaining pear ingredients, stir and cook on low heat for around 10 minutes until the pear is soft. Place the pear in a container and put in the refrigerator overnight. For the porridge, place all the ingredients in a bowl and mix to combine. Cover and let the mixture sit in the refrigerator overnight.

If, in the morning, the porridge mixture is a little stiff, simply add a splash of milk or yoghurt and mix in to loosen. Place your stewed pear on top of the porridge, then heat in the microwave on high for a minute if you would like it warm (tip: it's also delicious cold).



Recipes and images from *Kenkó Kitchen* by Kate Bradley, published by Hardie Grant Books, RRP \$39.95, available in stores nationally.



WHAT YOU'LL NEED

- 100 g (½ cup) cooked quinoa
- 90 g (⅓ cup) coconut cream
- 1 tsp rice malt syrup
- Splash of soy or almond milk, if needed
- 2 to 3 cherries, pitted
- 1 tsp pumpkin seeds
- Dried mulberries or any other fruit or seeds of choice

WHAT YOU'LL DO

Mix the cooked quinoa with the coconut cream and rice malt syrup. If a looser consistency is desired, add a splash of milk and cover and leave in the refrigerator until the morning. In the morning, pull it out of the refrigerator, top with the cherries, seeds and fruit and you're done.

Coconut Quinoa Porridge with Cherries and Seeds

SERVES 1



Buckwheat Bircher with Berries and Bee Pollen

SERVES 1



WHAT YOU'LL NEED

- 40 g (¼ cup) buckwheat groats
- Small handful of mixed nuts
- 1 small green apple, grated
- Juice of ½ orange
- 1 tbsp coconut cream or vegan yoghurt
- 1 tsp stevia or rice malt syrup
- ¼ tsp vanilla powder or ½ tsp vanilla extract
- Pinch of cardamom
- Pinch of cinnamon
- Pinch of nutmeg
- Berries, to serve
- Bee pollen, to serve (optional)
- Pomegranate seeds, to serve (optional)
- Coconut flakes, to serve (optional)

WHAT YOU'LL DO

Soak your buckwheat and nuts overnight in water. Then, in the morning, place all the ingredients, except the ones to serve, in a food processor and blitz until quite smooth. To serve, top with berries and bee pollen, pomegranate seeds and coconut flakes for a little crunch, if desired. ■

BODYBLITZ 2015 BODY TRANSFORMATION CHALLENGE

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AFTER

BEFORE

AFTER

BEFORE

BODYBLITZ WINNER NICOLA RIBBON

After struggling with weight gain all her life, Nicola Ribbon took the total transformation plunge and emerged with amazing results.

I have battled with weight gain since puberty. At my heaviest I weighed 99 kilos. After several failed weight loss attempts, I finally got down to 86 kilograms and felt fantastic. But when I travelled to New Zealand last year to surprise my sister, I was horrified at how heavy I looked in photographs and reminded myself the harsh reality that I was 26 kilos overweight. Over the years, I made excuses for my weight gain. I was under constant stress running a business, household, and the extra demands of caring for a special needs child. Over the years, I have battled with sleep deprivation and health problems. I've been on high doses of blood pressure medication normally given to heart failure patients; I was struggling to breathe and had arthritis in my joints and getting out of bed was done with assistance from my bed railing. I was constantly having scans, seeing doctors and having blood tests. I was in pain, I was tired and I was depressed. It was amazing how much better I started to feel about myself within days of starting my diet and exercise regime. Just knowing that I was making good, healthy choices and looking after myself was far more meaningful than how much I weighed or how much weight I'd lost. Instead of focusing on illnesses that were slowly killing me, I focused on living and living well. I no longer take any blood pressure medication, my joints are pain free, I don't need assistance to roll over and get out of bed and the staff at my gym keep reminding me that I don't complain that I feel unwell anymore. To top it all off, my partner proposed to me on Christmas day. So I'm looking forward to planning our wedding and enjoying our engagement as a slimmer, more youthful and healthier me.

On overcoming challenges:

When I started, I tried hard to convince my trainer that it wasn't that my body wasn't coping, it was saying, 'Nope, I can't do it.' But I learnt to remind myself that my body can do it. My personal trainer would say affirmations like, "If it doesn't challenge you it won't change you" and it reinforced what I was discovering about myself and about working out. Knowing how competitive I am, I reminded myself of any regrets I had in previous weight loss attempts and what I could do to improve. I was determined that there were to be no more regrets. I didn't want the BodyBlitz challenge to define my transformation, so instead I viewed it as a motivational step towards a better me, and a chance to inspire others.

On workout motivation:

I hit rock bottom when someone said they didn't think my partner would go out with someone like me. What hit me then was the reality of my appearance, the negative view I had about myself. It was obvious I wasn't looking after myself: I was overweight, unfit, unchallenged and looked terrible. Staying motivated was easy, I just had to remind myself how I feel when I'm not looking after myself.

On food swaps:

Back in the day, I was sucked into an illusion of convenience and comfort eating, often skipping breakfast and buying McDonald's on the way home from grocery shopping. I

wasn't eating that much food but what I was eating was toxic to my health. Since then, I've divided food, into categories: real food and non-real food. I divided the real food into proteins, fats and carbohydrates. I have always suffered from food intolerances so I took the advice of an allergist I saw and avoided all the foods my immune system was reacting to. I read a lot of information online and avoided foods promoting inflammation and ate more fish and nuts. If dinner didn't suit my dietary needs, my wonderful partner Simon helped prepare a second meal. Knowing that my kids are learning to respect their bodies and learning the difference between talking about healthy and unhealthy food and choosing to eat them is priceless

On treats:

As a treat I used to eat sugar-free lollies, sugar-free chocolate bars or sugar-free hot chocolate drinks, but during the challenge, I made the decision to prioritise whole foods. I found a recipe for a totally 'transformation friendly' chocolate coconut ice cream made from coconut milk, coconut nectar and raw cocoa powder. Yum. I didn't reward myself for my weight loss but I did reward myself every week for eating healthy

(F) WHAT I ATE:

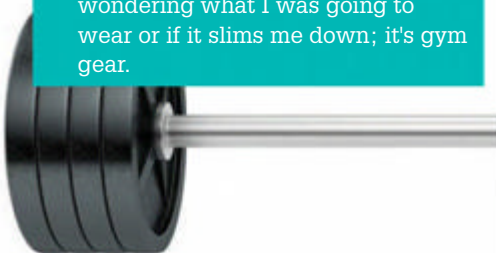
Breakfast: Eggs or protein shake; or salmon with vegetables; or salad and nuts; or coffee with coconut oil
Snack: Boiled egg or nuts and cucumbers or snow peas
Lunch: Lean beef or prawns or salmon with vegetables or salad
Snack: Boiled egg or nuts and cucumbers or snow peas
Dinner: Lean beef or prawns or salmon with vegetables or salad
Snack: Low-sugar chocolate or nuts

(H) WHAT I DID:

Monday: Cardio and strength training with PT
Tuesday: Lap swimming
Wednesday: Treadmill walking uphill and jogging and upper body workout
Thursday: Cardio and strength training with PT
Friday: Treadmill walking uphill and jogging, and lower body workout
Saturday: Bootcamp
Sunday: Day off

FITNESS CHEAT NOTES

- » My trainer taught me the importance of correct exercise technique; there is honestly no point in doing 100 squats if your positioning is incorrect.
- » It was hard work. There were times I wondered if I was torturing myself but there were plenty of fun times too. I mean how hard is it to poke your butt out while doing a squat? I'm not sure....but getting to watch my hot personal trainer demonstrate is worth every penny.
- » Going to the gym is easy. I didn't have to fluff around in the morning wondering what I was going to wear or if it slims me down; it's gym gear.



and for training hard. Thinks like a pedicure or manicure, or having a massage or getting my hair done.

On measurements:

My personal trainer changed my focus away from numbers on scales and encouraged me to focus on where I wanted to be in terms of how I felt and looked. He challenged my attitude towards exercise and what I believed my physical barriers were. At first I didn't like the fact that my body sweated so much; even my eyelids felt like they were dripping sweat. He convinced me that if my workout didn't challenge me, it wasn't going to change me. My biggest fear was regaining weight, but one of the staff at the gym helped me realise that all these concerns were just negative thoughts empowered by emotional attachments, and they were holding me back. I had to honestly believe that in 10 years' time I would still be going to the gym, eating healthy and still be in a healthy weight range.

On goals:

Since getting through the holidays and having my PT away, it's been hard to adjust to being out of my routine. My goal now is to lower my body fat percentage, increase my fitness and continue strengthening my core. It's just a matter of staying focused now. ■

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RRP: \$74.95 for 1kg | www.amazonia.com.au



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www.sunsol.com.au



ANTI-AGEING HERO

Anthogenol has a reputation as the ultimate anti-ageing antioxidant supplement. Its benefits go beyond the surface of the skin: in Europe the same substance is used for blood circulation and relief from varicose veins, but it's also been rumoured to increase energy, improve sports performance and speed recovery from illness! More commonly, Anthogenol is used to reduce the appearance of fine lines and wrinkles. Available in pharmacies and some health food stores.

RRP: \$198 for 90 tablets
www.blooms.com.au



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Green is the new black at Planet Organic. They have restyled the packaging of their loose-leaf tea canisters to match the rest of their organic tea range, and that means Planet Green! Loose-leaf teas are available in green, English breakfast, peppermint, earl grey, chamomile and chai.

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SEARCH FOR 'WHF'

HOW TO BE... Courtney Hancock

Being a champion ironwoman and model takes more than just a strong body. According to Courtney Hancock, it also takes loads of smiles, good food and snoozing in the sun.

The best advice I've ever received was to always smile, no matter what you're going through, because you never know whose day you might have made.

Heathly eating is really important to me because you only get one body and mind. When I'm making an effort to eat clean, I remind myself of how good it feels to be healthy, and how much energy this food will give me to train for my next session.

When I cook, it's really basic, but healthy. Being a full-time athlete, I need to eat food that will help me with recovery and energy. My friends will tell you I'm always checking what food is in the fridge! I stick to plenty of meat cooked on the barbeque, vegies and gluten-free pasta.

The night before a race I always have Mum's spaghetti bolognese. But I prepare with lots of good food in the week leading up, and drink plenty of water! I use Endura Rehydration, too, when I really need to refuel and rehydrate.

Before big competitions I go to bed early and stretch every day. I also paint my nails pink! It's also important to keep relaxed and be organised with all my racing gear.

My best advice for achieving your fitness goals is to set yourself everyday goals as well as 12-month goals. And you absolutely have to be organised and have a routine



that suits your lifestyle.

When I don't feel like training, I think about how hard I worked to get where I am. Ever since I can remember, I wanted to be a professional athlete. The window for ironwomen is quite small because your body can only go on for so long, so I want to make the most of what I can

with the opportunity I have been given.

My top tip for boosting health and wellbeing is to laugh as much as you can and reward your body. A treat for your body doesn't have to be food; get a facial or a body scrub or a foot massage, or do yoga once a week. We all expect so much from our bodies; we

need to treat them every now and then.

My favourite place to relax is Hawaii, but I also love the couch next to the garden at my house. There is the nicest afternoon wind that comes through – I usually find myself falling asleep.

My ultimate indulgence is a glass of Baileys.

My beauty routine is super simple, but I try to keep it consistent. I start my beauty routine at 5am as I am in the pool at 5.30am. I always wear a high-quality sunscreen on my face because even that early the sun is burning. I put sunscreen over my body before the afternoon session and also another coat on my face. Before bed I use a baby wipe to rub off excess sunscreen and then I apply a light moisturiser on my face and body. I also do a full body exfoliate once a week.

My number one beauty tip is to wear sunscreen every day under your make-up; you will love yourself for it later on.

My friends would say I'm spontaneous. I love a good laugh and a good story, but I'm also determined, up front, honest and caring. Some would also say that I'm disorganised and will never sit still for too long.

I never leave the house without my swimwear. It doesn't matter where I'm going, I will always check the surf when I am done. If it's good, that's where you will find me!

Courtney is sponsored by Endura Sports Nutrition. ■

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